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Sustainability strategy for the state of Brandenburg

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Sustainability strategy for the state of Brandenburg

Foreword by Minister President Dr. Dietmar Woidke

Dear Readers,

Shaping a sustainable future for our country is one of the first goals of the state government. Therefore, the principle of sustainable development has found its way into all policy areas. This sustainability strategy bundles the approaches and provides long-term orientation.

In Brandenburg, we are thus responding to global challenges such as the climate change, the demographic process, the more difficult financial eal framework conditions as well as the need to protect natural resources. Our country has its own opportunities for action. We want to use them, to make us fit for the future.

The strategy describes the current situation and the challenges we face. Furthermore, it formulates guidelines and goals and names measures that can serve to achieve the goals. The state government wants to set a good example. In this way, it offers starting points for local authorities, organizations and associations, as well as for the personal actions of individuals. After all, implementing the sustainability strategy is not just a political task, but a task for society as a whole.

Many people were involved in the development of the strategy. I would like to thank them all. After all, civic engagement is indispensable for a vibrant democracy. Please help us to implement this new strategy and fill it with life. This is the only way to ensure the sustainable development of our country.

Your

Dietmar Woidke

Dr. Dietmar Woidke
Minister President of the State of Brandenburg

Foreword by the Minister for the Environment, Health and Consumer Protection on the State Sustainability Strategy

Dear Reader,

Sustainability touches people everywhere. We all make decisions every day that have environmental, social and economic impacts and are equally affected by the decisions of others. Society rightly expects politics to set a framework in this regard in order to secure development opportunities for all. On April 29, 2014, the state government adopted the sustainability strategy for the state of Brandenburg. It has thus presented the concept of how it intends to align its policies with the guiding principle of sustainable development in order to make the state more fit for the future. It summarizes its understanding of sustainability in four key questions.

These relate to the carrying capacity of the natural balance, welfare and well-being, international relations based on solidarity and the participation of all in decision-making.

Specifically, the strategy focuses on five key areas for action: 1. economy and employment, 2. cities and villages, 3. energy and climate, 4. finance, 5. education. It contains overarching guidelines, formulates goals and describes numerous measures to achieve them. All of the selected areas of action can only be implemented on an interdepartmental basis.

fend of the issue. The state government therefore formed an interministerial working group. In this way the competencies of all ministries into the strategy.

A strategy for the country can only be successful if it is supported by society. Therefore, many opportunities for participation were offered during the development of the strategy: Major events, workshops and two online participations. Citizens, municipalities, business, science, associations and those gathered in the Youth Forum took advantage of the opportunity and took positions and made suggestions in discussions with representatives of the state government and administration. The Advisory Council for Sustainable Development accompanied the process constructively and with commitment.

I would like to thank everyone for this. They helped shape the strategy and also thought about how they themselves could act sustainably(more). The many applications for the Sustainability Award, which we presented for the first time this year, bear witness to this: It shows that many people are already living out sustainability. This commitment strengthens my conviction that Brandenburg is on the right path to becoming fit for children.

However, most of the work still lies ahead of us. To get it done, we need above all you, the citizens of our country. Get involved in this central task for the future!

Your

Anita Tack

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A Introduction

1. Sustainability - the path to political strategy

It goes without saying that one of the state's goals is to preserve the natural foundations of life. The state also faces major challenges in other areas, such as the following
in the context of demographic development. In order to here

to find solutions that are viable in the long term.

Turning to sustainable development and thus ensuring the future viability of the country and justice between the generations. This, in turn, can only be achieved through a whole-of-society effort. On the one hand, public debate is making it increasingly clear that the way we live, work, and shape society and politics requires fundamental societal change and calls for new political perspectives. On the other hand, more and more citizens are beginning to orient their personal behavior to sustainability standards. This development shows that there is a growing desire for sustainability in society. Anchoring this in turn strategically in politics - this is the task the state government is tackling with the present

Strategy for Sustainable Development in Brandenburg.

Need for action grows

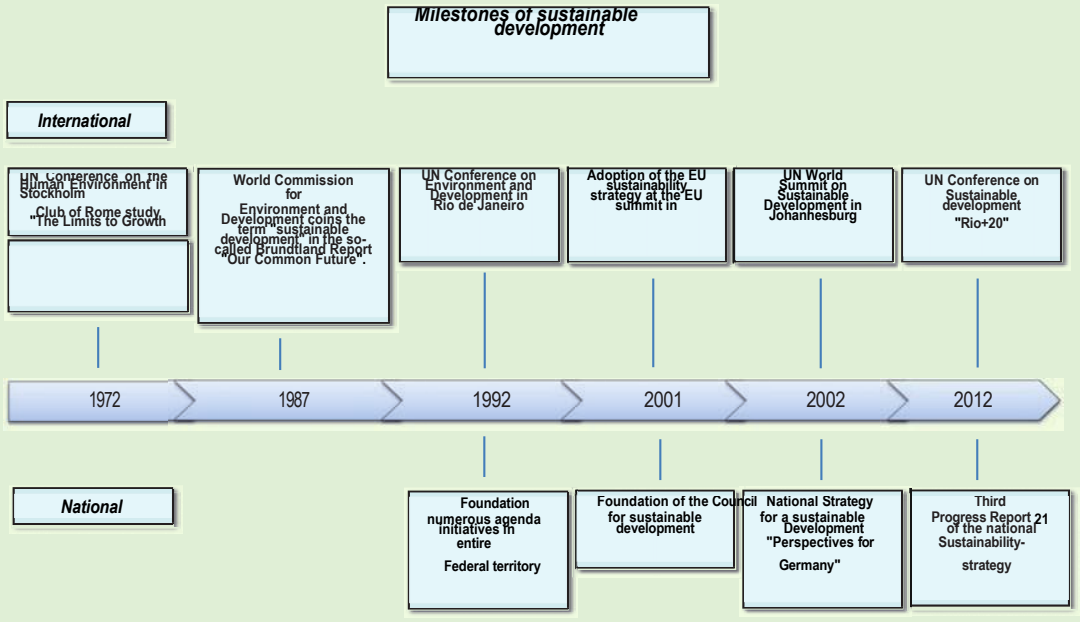
Despite worldwide efforts, unsustainable developments are intensifying on a global scale. This affects almost all relevant fields of action: Climate change, scarcity of natural resources and non-renewable energies, decline in biodiversity, global refugee flows, unequal distribution of life opportunities between rich and poor, economic and financial crisis, as well as dwindling governmental capacity. All of these problems directly affect Brandenburg.

Status of sustainability policy

At the 1992 World Conference on Environment and Development in Rio de Janeiro, the United Nations declared sustainable development to be the guiding principle of its policy, and renewed this at a series of follow-up meetings.

follow-up conferences. Subsequently, the
Member States in various conventions and agreements to make concrete contributions. In Germany, numerous com- munities began in the mid-1990s.

Fig. 1 International and national milestones of sustainable development



Source: Advisory Council for Sustainable Development of the State of Brandenburg

munities, companies and associations to develop strategies to enable sustainable development on the ground. Today, in many places these programs are into municipal action. Meanwhile a document on this subject is also available for Brandenburg. Cities and municipalities thus set important impulses for the federal and state governments as well. Since 2002, Germany has had a national sustainability strategy adopted by the federal government, which is continuously evaluated and updated. Almost all the German states have now adopted their own sustainability strategies or comparable documents. The EU revised its sustainability strategy in 2006.

Starting points for a sustainability strategy for Brandenburg

In order to breathe life into the National Strategy, the cooperation of the federal states is indispensable. After all, in the federal system, they are often responsible for implementation or at least involved in the measures. Accordingly, according to the Minister Presidents' Conference in 2008, the federal and state governments should work together on this issue. cooperate closely. This is now taking place. In addition European Structural Fund and agricultural policy is oriented toward the cross-cutting principle of sustainable development, for which benchmarks are to be developed at the state level. In a series of political

The country's strategies are related to the principles of sustainability. In civil society and the municipalities, in turn, there is a growing awareness of the problem and a willingness to align their own living conditions and perspectives with the guiding principle of sustainable development. The actors in society and business expect political orientation and support from the state government.

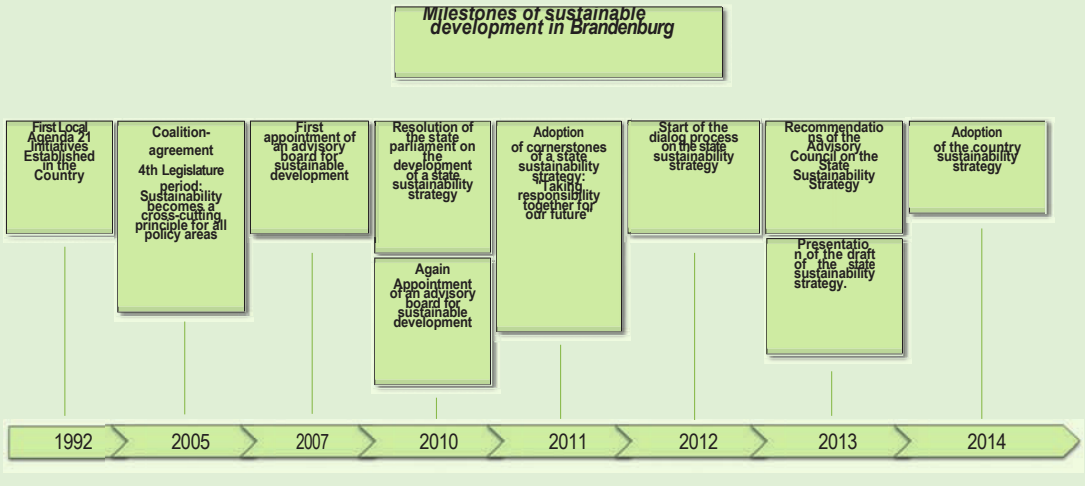
Political beginning

At the beginning of its term in office, the governing coalition agreed to take the principle of sustainable development into account in all areas. In a resolution of January 21, 2010, the state parliament called on the state government to present key points for a sustainability strategy and suggested that an independent advisory body be appointed again. In April 2010, the Minister for the Environment, Health and Consumer Protection appointed the Advisory Council for Sustainable Development; the adoption of key points followed in February 2011 and the development of the sustainability strategy began along these lines.

Advisory Board for Sustainable Development

The Advisory Council for Sustainable Development supported the preparation of the sustainability strategy, made its own contributions to it and promoted social dialogue on the subject.

Fig. 2 Milestones of sustainable development in Brandenburg



Source: Advisory Council for Sustainable Development of the State of Brandenburg

Transparency and participation

A sustainability strategy that is viable in the long term requires the participation and co-decision-making of civil society in its formulation and implementation. For this reason, an extensive dialog process was launched in 2012. More than 600 people took part in the kick-off event and five thematic workshops, the "Education for Sustainable Development Round Table" and a youth forum, contributing their knowledge and experience. A draft of the strategy was presented for discussion in December 2013 in an online consultation and at a dialog event. This sustainability strategy is thus based on the recommendations of the Sustainability Advisory Board and the results of the consultation and combines them with the sustainability-related activities and ideas of the state government. It is intended to motivate and activate as many social forces as possible to follow this path into the future. Whether the strategy can be successfully implemented depends not least on this.

Sustainable policy as a cross-cutting task

The integration of the various political fields and measures is the core of the understanding of sustainability. The state government has taken this into account by forming an interministerial working group. The cross-cutting principle is put into practice in procedures and instruments. This strategy also formulates overarching principles and guiding principles as well as benchmarks and goals in order to place policy within the common framework of sustainable development in Brandenburg. Other cross-cutting policy issues must be integrated here. In view of the increasing interconnection and interdependence of ecological, economic and social problems and living conditions, this applies above all to a coherent link between sustainable policy and the gender perspective. In selected focal points of action, the approaches to sustainable policy that already exist in many cases are bundled and indications are given for their further development. Cross-references between the various policies are established and the coordination, development and revision of existing strategies are facilitated.

Save and design

The mandatory consolidation of the state budget and the constitutional limit on permissible borrowing by the states from 2020 at the latest require that this strategy be implemented within the framework of available budgetary resources by setting appropriate priorities for the alloca- tion of funds.

The project is carried out by a permanent project sponsor. In the process, the

The principle of economic efficiency and economy is applied. The decision on the implementation and design of the measures will still have to be made on a case-by-case basis.

2. What does "sustainability" mean?"

In order to shape politics, the economy and society in Brandenburg in the spirit of sustainability, the state government and society must develop a common understanding of this multi-layered concept in order to align their actions with it. This is a great challenge, because it involves fundamental value orientations and diverging interests. It is therefore important to develop visions of the future and objectives of varying concreteness and scope. "Concrete visions" can clarify how the needs for a "good life" can be realized for everyone and what a society can look like that makes this possible.

In the following, the state government outlines its approach to understanding sustainable development. In this way, it aims to broaden the view of the many aspects of the problems and solutions, to give its policy a comprehensive orientation and at the same time to stimulate the social discourse.

Sustainability - a "categorical imperative

Starting point for the understanding of sustainability are the definitions of sustainability in the

→ Brundtland Report of 1987

→ in the main document of the 1992 World Summit in Rio de

Janeiro, the Agenda 21

Both definitions formulate the basic objectives of a sustainable development policy:

→ a fair distribution of life chances and

→ the preservation of the natural foundations of life

Both together form a prerequisite for the future viability of our society and for responsible action. This results in a "categorical imperative of sustainability":

→ Act in such a way that future generations will have the same opportunities.

The people have the opportunity to satisfy their own needs and to live their lives according to their own ideas.

Politics and society must consider the effects of their actions, especially on future generations, and take precautions. Long-term developments must be taken into account. The English term "sustainability" is also translated as "future viability". Concrete criteria must be developed to guide our actions.

Three dimensions of sustainability In practice, a distinction is usually made between three dimensions of sustainability: ecological, economic and social. This enables a more differentiated understanding of the causes and problems of unsustainable development. They show dependencies and interrelationships. The same applies to the actors involved and affected. Their respective interests and different areas of action can be identified in this way.

Considering the ecological, economic and social impacts of planned projects also broadens the view for problem aspects, actors, interests and political goals that have not been perceived so far.

The three dimensions are also represented with the images of three equal "pillars" or as an equilateral "triangle" of sustainability described. Such symmetry assumes an equal political significance or equality of the associated interests. However, this does not exist in general; the weighting is subject to a weighing process in each individual case.

Key issues in understanding sustainability Since sustainability is a complex guiding principle, it must be made more tangible for political action. Differentiating between the three dimensions of sustainability is useful, but not yet sufficient. Therefore, the state government orients itself on some core questions that try to concretize this and integrate the three dimensions in different ways.

1. **Are natural resources used in a way that preserves the earth's ecological carrying capacity?**

   The preservation of the natural foundations of life sets limits to the consumption of resources and thus also to material growth. In addition, the depletion of natural resources plays an important role for a sustainable economy. This requires us to follow the precautionary principle, to conserve finite resources and to promote the development of renewable resources and alternatives. At the same time, industrialized countries are making much greater use of natural resources, resulting in an unequal distribution of life opportunities globally. A measure of this is that in many respects we are moving toward "too

The classic definitions of sustainability

"Sustainable" is development "that meets the needs of the present generation without compromising the ability of future generations to meet their own needs and choose their own lifestyles."
Brundtland Report (1987)

"By uniting environmental and development interests...we can, however, succeed in ensuring the provision of basic needs, the improvement of living standards for all people, greater protection and management of ecosystems, and a more secure, prosperous future." *Agenda 21, Preamble (1992)*

living large," is the ecological footprint. It records how much land and water are required to cover the respective resource consumption and absorb the waste - such as the emission of the climate-damaging CO_2 . There are also other indicators, such as the amount of land used for settlements and transport.

areas, nitrate content of the groundwater and the Forest condition, which can be used to record the stress on natural livelihoods.

2. Do political, economic and societal actions serve to promote welfare and well-being?

For years, there has been a critical debate about whether the prosperity of a society can be measured solely on the basis of the production and distribution of goods and services, measured primarily by gross domestic product (GDP). Concentrating on material prosperity, as much as it is justified with a view to securing livelihoods, fails to take into account the diversity of societal

reality and the subjective perception of many-people past. Welfare, on the other hand

the personal well-being and thus also quality of life. However, this also depends on the availability and quality of infrastructures, as well as on social contacts and opportunities for self-development. Finally, for the

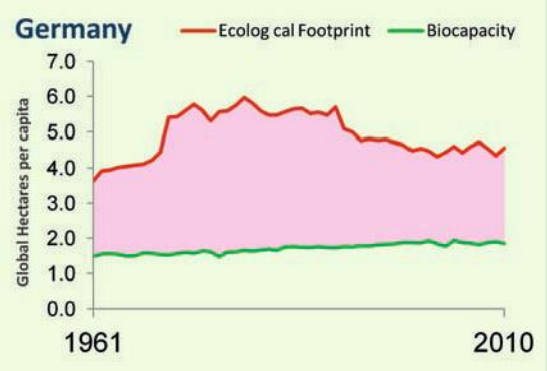
The extent to which a society provides equal opportunities is also important for its future viability. The form of production and consumption that is practiced also causes ecological burdens and damage to health. The Rio+20 Conference addressed this issue and formulated the concept of a "sustainable development".

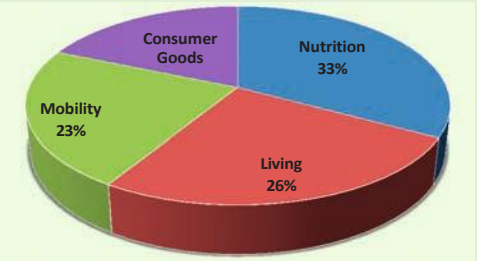
"Green Economy", which is oriented towards ecological sustainability, economic profitability and social inclusion. A comprehensive understanding of social welfare is therefore necessary and can open the view for new social potentials of wealth.

In order to place economic activity in this context, welfare-increasing and -reducing factors must be taken into account. This is done, for example, by the National Welfare Index (NWI). It shows that social welfare does not necessarily increase with material prosperity. Rather, according to the development of the NWI - since the beginning of the 21st century - material prosperity has become decoupled from social welfare.

The Enquete Commission "Growth, Prosperity, Quality of Life - Paths to Sustainable Economies and Social Progress in the Social Market Economy" of the German Bundestag

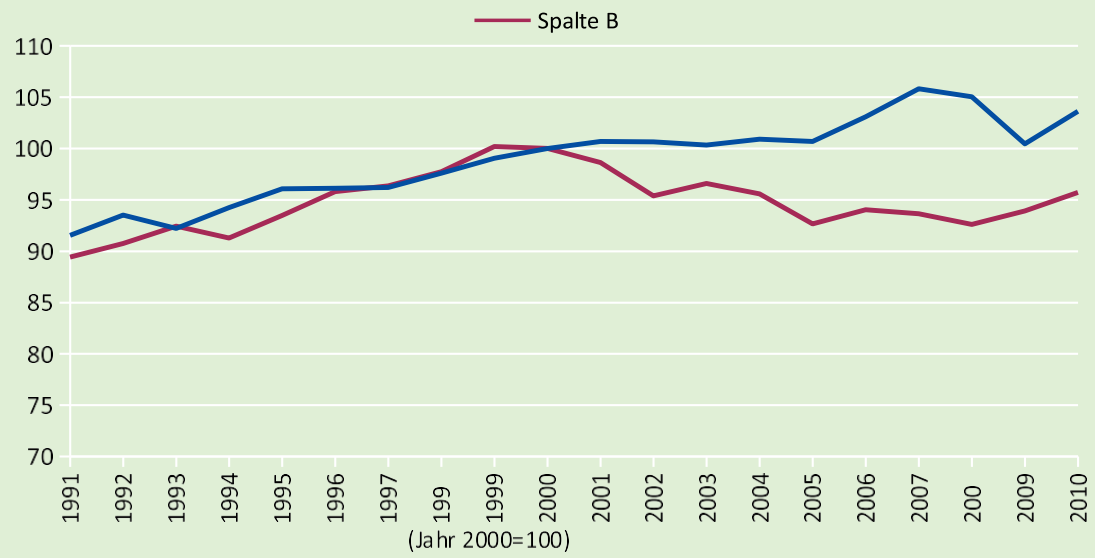
Fig. 3 **Ecological footprint of a German**





Sources: Ecological footprint of a German in absolute numbers (time series): Global Footprint Network; (http://www.footprintnetwork.org/de/index.php/GFN/page/trends/germany/)
Ecological footprint of a German according to areas of life: Greenpeace e.V. 2008: Footprint - the ecological footprint of Germany (own presentation).

Fig. 4 **Comparison of National Welfare Indicator 2.0 with Gross Domestic Product**



Source: Research Institute of the Protestant Study Community. Institute for Interdisciplinary Research e.V. (FEST) / Environmental Policy Research Centre (FFU), Federal Statistical Office; own presentation FEST/FFU.

has dealt extensively with the measurement of well-being. The final report of May 2013 contains an inventory and evaluation of existing indicator systems. Based on this, proposals were made for a holistic indicator of well-being and progress.

3. Do Brandenburg's international relations contribute to greater solidarity and development stability in the One World?

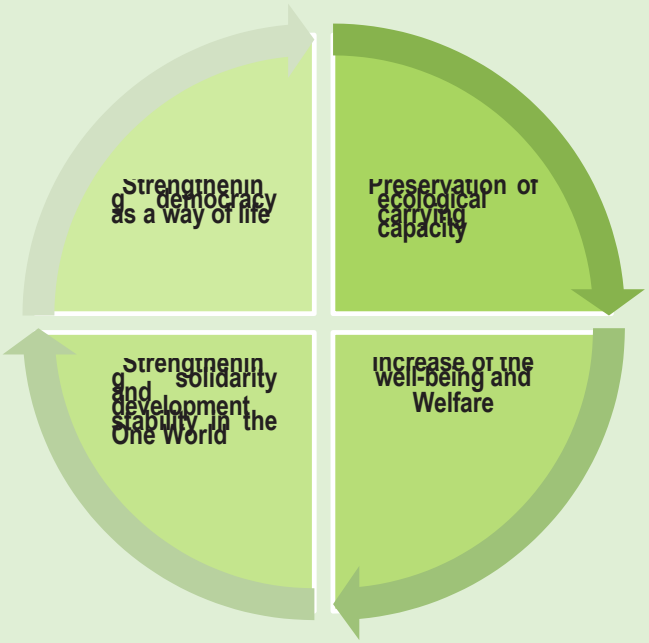
The country is called upon to live up to its responsibility and contribute to overcoming global problems through fair relations and solidarity-based action. The stronger economic interdependence within the framework of the globalization represents a challenge for the competitiveness of Brandenburg as a business location. At the same time, an orientation towards sustainable industries, environmentally compatible technologies and sustainable products offers great opportunities for international cooperation and a diverse exchange in the interest of all sides. However, globalization goes far beyond this and also includes cooperation and the exchange of ideas.

Exchange between people and social initiatives in many areas, through cross-border cooperation and international partnerships, for example in the areas of formal and non-formal education.

4. Do the actions of politics, administration and companies promote the participation of all in the decision-making and design processes and thus democracy as a way of life? Sustainable development affects all people. It is preceded by cultural and social change, which they must support and live. For this, democratic participation in decision-making processes is important, and it is not enough to have established democracy as a form of state and society.

ben. It must be cultivated as a way of life. Lived-In turn, democracy is a prerequisite for social and political processes of learning, searching and shaping. Only through participation will civic engagement be maintained and develop locally and in the communities. Support from the state is needed so that social forces can assume their responsibilities.

Fig. 5 Core issues of the understanding of sustainability



Ways of Sustainable Development

These core questions illustrate the need for action and provide political orientation. They mar- ket, described with a picture, the "fairway". Against this background, policymakers set medium- and long-term goals and back them up with indicators. These indicators show whether their measures are effective. They also help to identify unintended effects and to weigh up alternative courses of action.

Sustainability as a democratic learning, search and design process

Sustainable policy seeks a broad social consensus and therefore often looks first for win-win situations. These can be supported by many and are therefore easier to implement. Nevertheless, sustainable policy must not exclude the confrontation shy away from conflicts of goals and interests. Political Compromises are necessary and particular interests must be justified in democratic discourse. They must be measured against ethical values and the social consequences of their actions. At the same time, they must overcome their fixation on short-term benefits. Only such enlightened interests become negotiable and enable a balance of interests, for example through consensus or a democratically legitimized majority decision. Sustainable politics is oriented toward the common good, sets limits to particular interests and at the same time offers them perspectives.

Action - Concrete priorities

B

3. Selection of focal points for action

The sustainability strategy for the state of Brandenburg is specifically geared to the conditions in the state. This means that it takes into account the specific local conditions and the political circumstances. At the same time, it takes into account the needs as well as the personal responsibility of the people. It addresses both the problems and the local and regional potentials for overcoming them. In addition, it refers to the sustainability strategy of the federal government as well as to corresponding concepts of the European Union (European Sustainability Strategy, Europe 2020).

In order to achieve the greatest possible benefit with the capacities deployed, the strategy concentrates on certain key areas of action. These were selected on the basis of the following criteria:

→ **Need for action, long-term nature and global reference: In** which areas are risks, opportunities, weaknesses or strengths for Brandenburg foreseeable in the longer term? Which national, European and global developments will affect the country particularly seriously?

→ **Integration requirement:** In which areas can an integrative and interdepartmental approach from the perspective of sustainable development be of particular benefit and generate additional added value?

→ **Options for action:** Does the country in do you have sufficient action and design competence in the areas in question?

On this basis, five key areas of action could be identified.

The following five chapters define the main points of the reflect the needs of the market:

→ Economy and labor in the capital region Berlin-Brandenburg

→ Liveable villages and cities

→ Brandenburg as a model region for energy transition and climate adaptation

→ Sustainable financial policy

→ Education and sustainable development

Other topics

During the preparation of the strategy, it became apparent that a number of other areas were in question for more in-depth consideration.

ing. In this way, references to international and national issues of the sustainability agenda can be established in a variety of ways. To this end, the two cross-cutting strategies for sustainable development and internationalization must be coordinated in their concretization and implementation. The local level is of fundamental importance for a Sustainable Brandenburg; many goals and measures of the strategy are understood as an offer to the local level. And the surrounding area of Berlin, which is characterized by dynamism and immigration, faces a variety of challenges with regard to sustainable development.

→ Biodiversity and land use

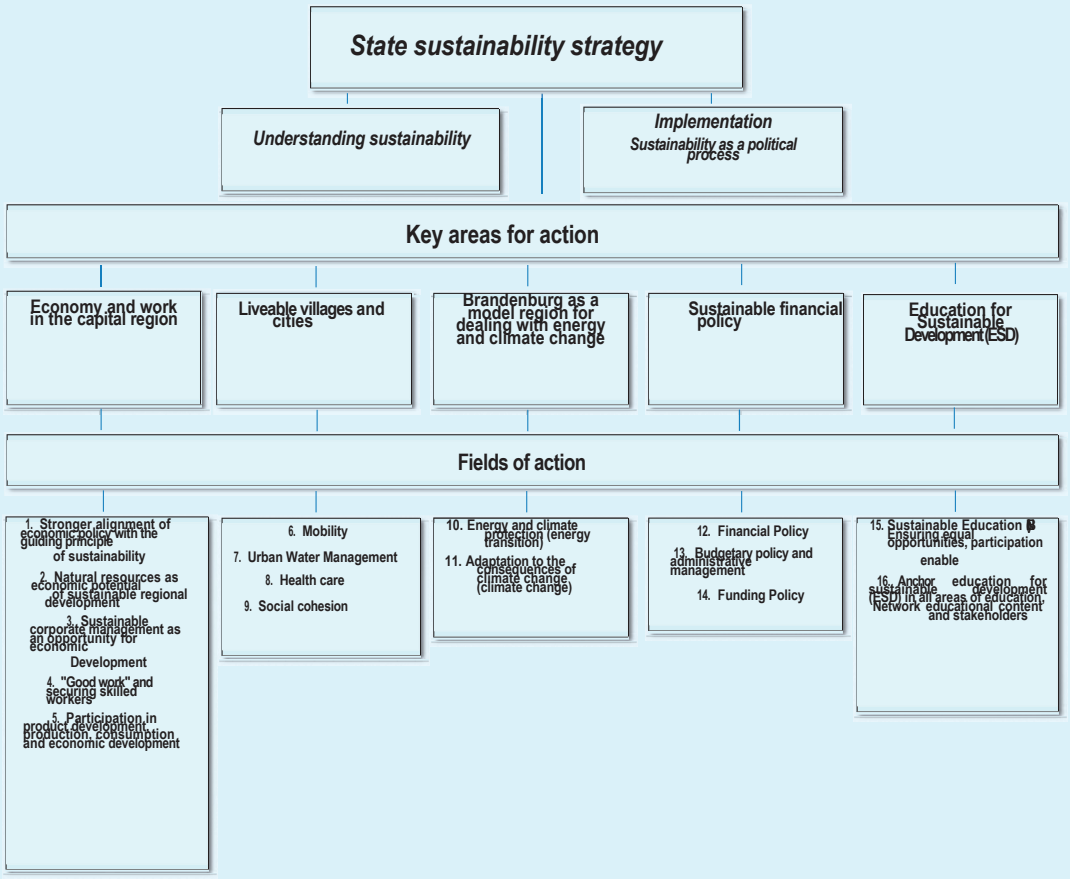
Nature conservation and land use are of paramount importance for the development capacity of an area like Brandenburg. Biological diversity is the basis for numerous ecosystem services. Since biological diversity and land use are closely linked, sustainable land use is of particular importance. Individual strategies, such as the biodiversity action program and the biomass strategy, already address this issue. The sustainability strategy also includes relevant issues in its priorities for action, without yet dedicating a separate chapter to this complex topic. In view of the many interactions and

numerous conflicting objectives, there can be no simple solutions. Other land use aspects, such as those arising from measures against the consequences of flooding or in relation to local actions for GMO-free regions, can also be included here.

→ Equal living conditions

When are living conditions equivalent? How can this term be interpreted appropriately under today's conditions? What are the chances of achieving this goal in the future, and by what means should this be done? Does the state have sufficient possibilities to achieve this goal, and how can it do so? These questions will be addressed only in rudimentary form in Chapter 5, "Liveable Villages and Cities.

Fig. 6 Structure of the sustainability strategy



4. Business and labor in the Berlin-Brandenburg main city region

4.1. Initial situation

A prospering economy is an indispensable basis for ensuring Brandenburg's prosperity and ability to develop. The orientation of the Brandenburg economy to the guiding principle of sustainable development can help to ensure that economic development is ecologically and socially balanced as well as economically successful.

The Berlin-Brandenburg capital region is increasingly developing into a common economic area and labor market. This in turn opens up opportunities for the entire region. These can be realized, above all, if Berlin and Brandenburg can develop their respective specific profiles, potentials and locational advantages.
and bring them into the cooperation.

Good conditions

Brandenburg's economic policy strategy "Strong for the Future - Joining Forces!" is a successful structural policy. It brings together three integrative economic policy strategies - the SME strategy, the cluster strategy and the ProIndustry action plan - as well as the fields of activity and projects relevant to economic policy. One focus is on innovative future fields with above-average development prospects, which are being developed into sustainable clusters. The aim was and is to intensify networking among companies, but also between industry and science, and thus to strengthen the innovative strength of companies and increase value creation. This concern is also expressed in the Joint Innovati- on Strategy of the states of Berlin and Brandenburg (in- noBB), which was supported by a Brandenburg

cluster strategy (innoBB plus). Overall, this also creates good conditions for promoting Brandenburg as a location for sustainable economic development.

and "Good Work" and to promote sustainability.
as a benchmark in innovation and economic policy. The same applies to Brandenburg's strategy for skilled workers: "Educating, retaining and attracting Brandenburg's skilled workers.

Challenges

Brandenburg continues to have a heterogeneous, small-scale corporate structure with only a few

Large Enterprises. Although there is a profiled Research and development landscape, the transfer of knowledge between research and business

is still expandable, however. In addition, there is often a lack of

- Despite a very well-developed research infrastructure, R&D capacities at companies are still too low. Unemployment remains at too high a level (cf. figure 7), and there is a pronounced lack of skilled labor.

Low-wage sector. The demographic development will exacerbate the shortage of skilled workers. This threatens to lead to a shortage of skilled workers in the medium term. This harbors the risk that key industries will be

and economic power and prosperity are declining. At the same time, the disparities in economic development and the development of working and living conditions between the Berlin hinterland and the peripheral areas of Brandenburg are deepening.

Potentials

Brandenburg has a rich biological diversity as well as a multitude of services provided by the ecosystems. Both are important foundations for economic development. The rich cultural landscape and the differentiated university and research landscape also offer usable opportunities.

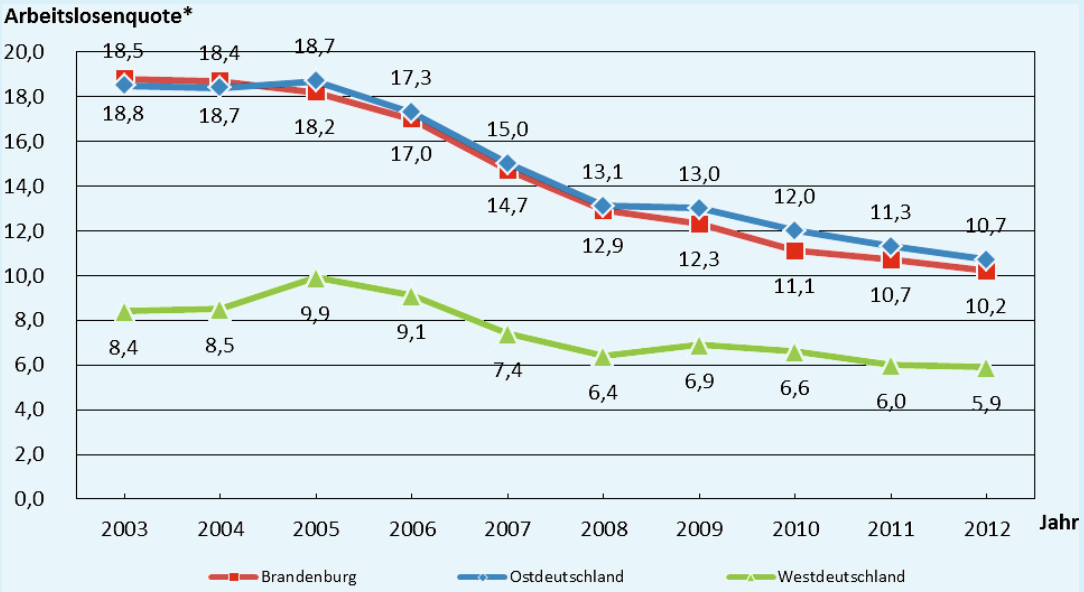
The new funding period of the EU Structural Funds offers the opportunity to strengthen regional innovation policy.

deepening, while also ensuring a gentle, efficient Strengthening the use of resources.

4.2. Need for action

Global developments, such as unstable financial markets, climate change and scarcity of resources, touch on

Fig. 7 **Unemployment rate in Brandenburg, eastern and western Germany**



Source: Ministry of Labor, Social Affairs, Women and Family (ed.): Report on the Labor Market in the State of Brandenburg 2012/2013, Potsdam, Novem- ber 2013, page 47, Figure 21.

Brandenburg directly as well. They require sustainable environmental, climate and resource protection in the region and a long-term policy. Economic and labor policies must be strategically aligned and adapted to changing conditions. This includes, in particular, the demo-

graphical change, the financial scarcity of public households and the increase in spatial inequalities within the country.

Guiding principles of entrepreneurial action

As before, guiding principles and standards of socio-nomic corporate responsibility - e.g., Cor-

porate Social Responsibility (CSR) and certified environmental management systems - are not sufficiently widespread. They are still not considered enough as an opportunity for economic development. The potential of the environmental partnership between the country and companies does not yet seem to have been fully exploited.

In Brandenburg, it is predominantly small and medium-sized enterprises (SMEs) that do business. They only have

limited time and financial resources to

to implement sustainability management and to secure skilled workers with foresight. On the one hand, such an economic structure poses special challenges. On the other hand, it offers great potential due to the pronounced regional economic orientation of SMEs.

he demographic change makes the availability and quality of skilled workers and employees to strategic location factors and thus a core element of regional development. After several years of stagnation, a significant increase in the demand for skilled workers in Brandenburg can be observed again. According to the IAB Establishment Panel 2012, the demand for skilled workers in Brandenburg (as the sum of skilled worker hires and unfilled skilled worker positions in the companies in the respective previous six months) was about 54 thousand persons (cf. Figure 9)). As a result, the quality of work is gaining considerably in importance: It is becoming a central factor for economic development. This in turn places demands on the

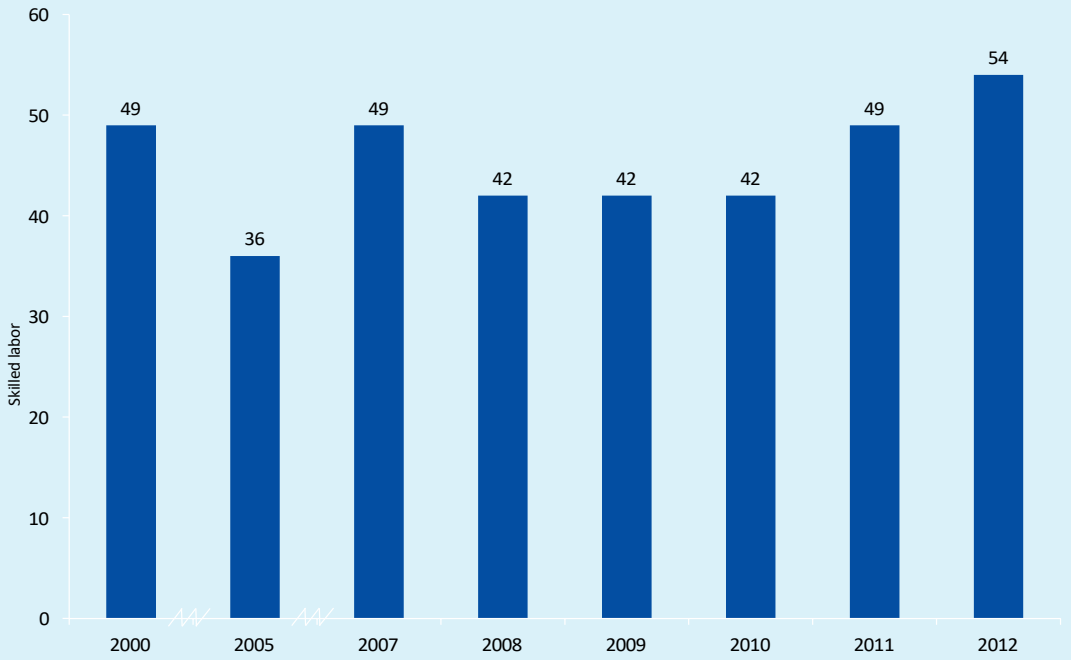
Profiling labor policy in line with the mission statement "Good work". This includes reliable and stable

Fig. 8 **Companies with employees subject to social insurance contributions (SvB) by size classes in Brandenburg** (reporting date: June 30, 2012).

Region	Total SvB	Share of SvB in companies with ... SvB in percent								
		1-5	6-9	10-19	20-49	50-99	100-199	200-249	250-499	500 and more
Country Brandenburg	770.620	12,8	7,4	10,8	16,5	13,2	13,5	3,5	9,2	13,0
East Germany	5.462.921	11,8	6,7	10,2	15,6	13,0	13,0	3,6	9,9	16,2
West Germany	23.457.667	10,4	6,2	9,4	13,7	11,7	12,0	3,5	10,5	22,6
	Total operations	Share of companies with ... SvB in percent								
		1-5	6-9	10-19	20-49	50-99	100-199	200-249	250-499	500 and more
Country Brandenburg	65.979	68,1	12,0	9,4	6,3	2,2	1,2	0,2	0,3	0,2
East Germany	436.232	68,1	11,7	9,5	6,4	2,3	1,2	0,2	0,4	0,2
West Germany	1.680.413	67,5	11,9	9,8	6,3	2,4	1,2	0,2	0,4	0,3

Source: Ministry of Labor, Social Affairs, Women and Family (ed.): Report on the Labor Market in the State of Brandenburg 2012/2013, Potsdam, Novem- ber 2013, page 13, table 2.

Fig. 9 **Development of Skilled Workforce Requirements in Brandenburg 2000 to 2012** (1st half of



Source: Ministry of Labor, Social Affairs, Women and Family (ed.): Entwicklung von Betrieben und Beschäftigung in Brandenburg. Ergebnisse der sieb- zehnten Welle des Betriebspanels Brandenburg, Reihe Forschungsberichte Nr. 37, Berlin, June 2013, p. 72, Figure 21.
For the years not shown, data were not collected in the IAB Establishment Panel.

Working conditions within the framework of a binding wage and collective bargaining system.

Realignment

The use of natural resources in Brandenburg is an important factor for sustainable management. However, the implementation can also
Conflicts of goals and uses arise, depending on the interes-

situation of the societal actors. To avoid conflicts effective communication processes are needed to cope with the challenges of sustainable development. If economic and labor policy is to be more strongly oriented toward the guiding principle of sustainable development, this means, in particular

→ the new meaning of responsibility, coope-
ration, transparency and participation. This applies to the economic activities of all interest groups in production, service provision and consumption.

→ in economic and labor policy, understanding and
The aim of the project is to build up a process for taking greater account of sustainable development in Brandenburg.

4.3. Guideline "Sustainable work in a sustainable economic region"

A sustainable economic and labor policy claims to be oriented toward the common good. This means that politics, business and society must focus on the sustainability of their actions.

and at the same time provide a framework and limits for individual interests. This requires an innovative political culture. At the same time, it sets new standards for cooperation between socially and institutionally separate areas. The focus of sustainable development is no longer on promoting individual technologies. Rather, it is about linking social, regulatory and technical innovations in such a way that new ways of life and production develop. The focus is on the "ecological footprint," which is considered a measure of the ecological sustainability of economic activity.

Model region

Overall, the Berlin-Brandenburg capital region should present itself as a model region for a sustainable

economic development. Their profile be-
it says,

→ sustainable work, economic and life for
to test and establish measures that improve the quality of life, taking into account ecological sustainability.

→ the image and attractiveness of an ecologically
investment, industry and labor location in the sense of "Green & Fair Economy".

→ natural, non-renewable resources also
Preserve for future generations

→ in an intact, social and natural environment
to offer companies as well as well-trained specialists and executives attractive conditions for settling in the region, and thus to compete with other companies.

regions to make their mark.

Sustainable regional development

Sustainable regional development can only unfold if it takes into account the different reference systems and spatial boundaries - e.g. natural space, regional economic development space, social and living space as well as administrative jurisdictional boundaries - and if it is able to adapt to them.

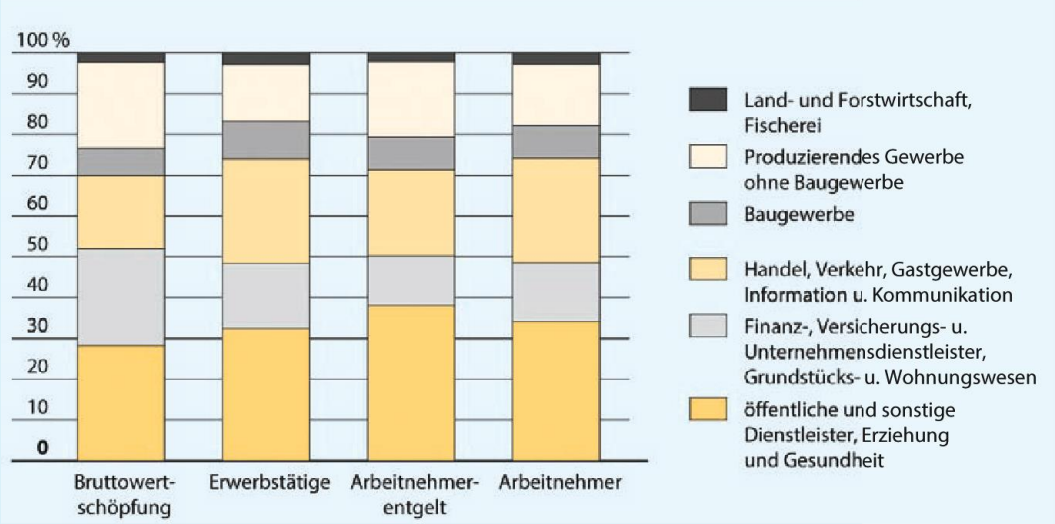
same - with a view to the specific interrelationships
with Berlin - cross-border on strategic

fields of action. In these fields, it must offer stakeholders sufficient orientation and room for maneuver.

Rethinking the stakeholders

In order to preserve the natural foundations of life and the economy, to ensure social justice and social welfare, and to enable greater democratic participation in economic production and consumption processes, interest groups that have so far tended to act se- parately must rethink. Many companies are already addressing these issues and see themselves as having a greater sense of responsibility - contributing to the sustainability of products and services, to the socially and environmentally compatible design of production and value creation processes, and to the development of regional economic cycles. This requires a new quality of partnership and dialog between politics, administration, companies, employees and society. What is needed is a willingness to engage in communication processes and social learning, and to exchange experiences. The driving forces for this are the actors, the "pioneers of change.

Fig. 10 **Gross value added, persons employed, compensation of employees and employees 2012 by economic sector**



Source: Berlin-Brandenburg Statistics Office, Statistical Yearbook 2013

4.4. H anding fields

The selected fields of action for a sustainable economic and labor policy focus on topics that are strategically important for the state and offer high potential for a sustainable economy in the region. They build on existing initiatives and strengths and offer opportunities for exploration, implementation and the initiation of search and learning processes.

Field of action 1: Stronger alignment of economic policy with the guiding principle of sustainability

Targets

Building on the region's common vision, one opportunity lies in making the Berlin-Brandenburg capital region a model for sustainable economic development.

and ways of life. This should
make the living space attractive and help companies and skilled workers settle in the region. Cooperation between Brandenburg and Berlin plays an important role here:

→ The spatial diversity and the so-
ziocultural diversity in the region as a whole and to develop targeted synergies, for example between urban lifestyles and economic styles in Berlin and Brandenburg's natural potential, which is important for the development of regional value chains.

→ Solutions for mobility without fossil fuels
le fuels, energy transition and bioeconomy should build on the region's strengths and develop their potential on the market side in close cooperation with Berlin.

→ Through targeted promotion of marketability after-
The cooperation between producers, users and regulating institutions can open up regional lead markets through the development of sustainable innovations. These can dock onto global markets, as the examples of wind energy and electromobility show.

→ Brandenburg may prove to be a particularly post
sustainability and health-oriented tourism and economic region. Added to this is the profile of a region with regenerative energi-
The region has a strong focus on nature, organic farming and the health economy.

Sustainable economic policy for **Brandenburg**

Such a policy aims more strongly than before at largely closed cycles where it makes sense, supports regional production and value chains as well as the sale of regional products. In addition,

it focuses on resource efficiency and sufficiency. Be-
There are particular opportunities in the bioeconomy, agriculture, forestry, food, energy, construction, transport and tourism sectors, and in

of logistics. It thus distinguishes itself in competition of the regions and creates lead markets and products that can compete internationally.

Sustainable tourism

The goal of sustainable tourism in Brandenburg is to combine the needs of guests and the local population with those of nature conservation and environmental protection, and to strive for long-term economically successful and socially compatible development. In this way, it can make a significant contribution to sustainable value creation and to the well-being of the population, while at the same time acting as a driving force for sustainable regional development in rural areas and creating positive structural-policy effects. Sustainability in tourism is not a type of tourism, but a cross-sectional topic of the industry, which must be further developed together in the coming years. To this end, stronger networking with the science and research institutions of the states of Berlin and Brandenburg, the local and supra-regional social players, and other clusters in Berlin-Brandenburg, such as "energy technology", "health industry", "ICT, media and creative industries", "transport, mobility and logistics", and above all "food industry", is being sought.

Sustainable procurement

The aim continues to be to gear the demand of public authorities more strongly towards sustainable procurement and to make it transparent via socio-ecological selection criteria. In this way, public procurement practice should contribute to the development and stabilization of sustainable products and markets through changed demand behavior.

Use of synergies

It is particularly important to exploit synergies between science, business and society. This is achieved through innovative transfer measures, such as the promotion of knowledge and technology transfer and implementation-oriented, transformative research, as well as through the organization of regional economic experience transfers. It is equally important to promote cooperation between universities on the one hand and small and medium-sized enterprises (SMEs) on the other.

on the other hand, to further improve the qualifi-
to retain skilled workers in Brandenburg at an early stage.

Aligning regional economic policy with sustainable development requires

→ Anchoring sustainability as a departmental overarching principle in the planning and implementation of support programs.

→ a regular review and, if necessary, a Readjustment of economic policy and its ins- truments

→ taking into account the different room types The Berlin-Brandenburg capital region: the Berlin region and the wider metropolitan area.

space. The specific strengths of the and innovative approaches of the peripheral regions of Brandenburg.

→ tapping into existing potential for the regional economic development. In addition, it is important to develop clusters in such a way that they can also be applied to res-

Measures*

→ **Establishing selected stable lead markets as docking points to global markets:** This is done in close interaction between producers and local consumers, as well as through the use of regional economic regulations and support instruments.

→ **Examine additional cross-fund approaches to** promote local action, as well as to enhance the integrate urban and rural development to a greater extent

→ **Promoting the development of sustainable products and services and the creation of small-scale**
The aim is to promote the development of spatial economic cycles within the framework of model projects, and to create better framework conditions for sustainable products and services in order to facilitate their market entry and marketing. This also includes targeted information and support measures with regard to specialized funding and financing measures, especially for small and micro-enterprises, and embedding them in a cross-sectoral management concept (regional marketing).

→ **Promoting** new forms of sharing and the joint use of knowledge, experience, res-
sources and goods **(share economy and collaborative consumption)** in pilot areas of the economy, sustainable mobility (car sharing, freight exchanges), in the energy sector and in bartering. Supporting the development and implementation of suitable marketing, financing and distribution models.

→ **Support for innovative actors, networks and sustainable enterprises.**
menscapes that specialize in smart products, services and technologies. These include, in particular, initiatives for regional generation and use of renewable energies

→ **Securing permanent and appropriate coordination structures** to ensure long-term coopera-
Maintaining the stability of existing structures that is necessary for the stability of value chains, future fields, clusters and networks.

→ **Consideration of appropriate and specific sustainability criteria for the evaluation and monitoring in the promotion of clusters and regional growth cores**

→ **Consideration of sustainability** as a cross-cutting principle in the European Struc-
The European Structural and Investment Funds (ESI Funds) in program planning, the definition of project selection criteria, evaluation and accompanying monitoring.

→ **Strengthening the cooperation of research institutions and universities with companies.**

source-efficient, nature-compatible innovations targets. Sustainable innovations are to be given priority, as also required by the guidelines of the Joint Innovation Strategy (innoBB) and innoBB plus.

→ research on sustainable regional development
The aim of the project is to strengthen the development of regional economic development and the transfer of knowledge into practice.

→ Orientation towards model-like, transferable approaches.
and their actors, the "pioneers" of change.

Field of action 2: Natural resources as economic potential for sustainable regional development

Targets

The aim is to use the natural resources in Brandenburg sparingly, to maintain their functionality in the long term and to align land use accordingly. Only in this way can biodiversity and the stability of ecosystem services be permanently preserved as agricultural potential. Ecosystem services include, for example, functioning material flows as the basis for production and consumption, a stable landscape water balance, the provision of sinks (e.g. for carbon uptake) and robustness in the face of climate change. All of this also helps to ensure the competitiveness of agricultural, forestry and fishery enterprises and to further expand Brandenburg's leading position in ecological agriculture. The natural resources to be preserved form an invaluable experience factor for tourism and local recreation with considerable economic potential. In the case of non-renewable natural resources, low consumption and high recycling rates are to be aimed for, and the long-term availability of raw material potentials is to be secured by means of suitable planning instruments.

Sustainable products from nature-friendly regional agriculture

The aim is to specifically promote the cultivation and processing of products from nature-friendly agricultural production and species-appropriate animal husbandry, so that healthy food can be produced and at the same time preserve biodiversity on agricultural land. The same applies to regional value chains for food and energy, so that they can meet regional demand.

can cover. The non-certified conventional
The farmers and farmers' associations must consistently implement the requirements of good professional practice and combine them with nature-friendly land use. In addition

can be achieved via the strengthening of regional plant-based
The negative effects of meat production can be limited through the use of the "closed-loop" system. Overall, the reform of the EU agricultural support system can be used as an incentive system for sustainable agriculture.

Sustainable construction

Sustainable building aims to reduce land use and create sustainable settlement structures. Through the interaction of ecological, economic and socio-cultural criteria, the consumption of resources is to be reduced. By means of an overall concept, a contribution is made to the protection of the environment and to the optimization of the economic potential of a building.

Ensuring that a building has the longest possible lifespan is an important goal of sustainable construction and includes the possibility of changing the use of buildings. The change of use of buildings can help to reduce the amount of land required for new buildings.

Sustainable construction also helps to strengthen the regional circular economy and protect resources. The goal of the circular economy is to ensure a high recycling rate of construction waste while taking groundwater and soil protection into account. This is achieved by optimizing the use of construction materials and products and taking life cycle considerations as a basis. This is complemented by high-quality recycling in building construction and civil engineering. Sustainable construction also reduces the consumption of energy (heating and electricity), water and wastewater.

Nature-friendly cultivation of biomass

If renewable energies are generated by biomass, this should be in line with a sustainable energy

policy.

The aim of the project is to develop and implement a sustainable agricultural system for food production and to take into account the ecological carrying capacity of landscapes with regard to the conservation of natural resources. To this end, alternatives to monocultures must be implemented or developed, for example through research and the establishment of intelligent agroforestry systems.

or use of landscape maintenance material as well as by increasing the use of waste from agricultural production for energy.

Model region for a knowledge-based bioeconomy

The goal is to develop a biogenic raw material base, to use renewable resources in cascades as far as possible, and to do so in a way that is gentle on people and the environment. Together, Berlin and Brandenburg can develop into a model region for a knowledge-based bioeconomy. The development of potential in the field of action "Biotechnology and Pharmaceuticals" in the "Health Industry" cluster and in the cross-sectional topic "Clean Technologies" of the Joint Innovation Strategy can also contribute to this.

Advancing biorefinery technology

The existing research capacities as well as the natural resources make it possible for Brandenburg

possible to advance the concept of biorefinery technology.

drive. In this context, biomass serves as a source of raw materials for many different intermediate and end products, such as chemicals, materials, bioenergy and fuels - using all raw material components as completely as possible. With regard to regional value-added potential, there are great opportunities for regional production and decentralized processing.

Model regions for sustainable development

Brandenburg's 15 National Natural Landscapes (Lower Oder Valley National Park, three biosphere reserves and eleven nature parks) are model regions for sustainable regional development. They do not fulfill

only the internationally fixed mission, biological diversity. They also have the task of providing education for sustainable development and promoting their ecosystem services, especially for recreation, food and nature tourism.

in the long term. This also requires a future-oriented land use with exemplary character, GMO-free regions and a sustainable tourism industry that saves resources. This is what the tourism cluster development provides for. In this way, these areas can be experienced by the population and guests of the state. The goal is to preserve and further develop the National Natural Landscapes. The LEADER initiatives funded by the European Agricultural Fund for Rural Development (EAFRD) also promote sustainable, integrated rural development. They also build strong networks and partnerships.

Resolution of conflicts of use

In the case of land use, conflicts of use can arise

between-

between economic and nature conservation interests. The increasing demand for ag-

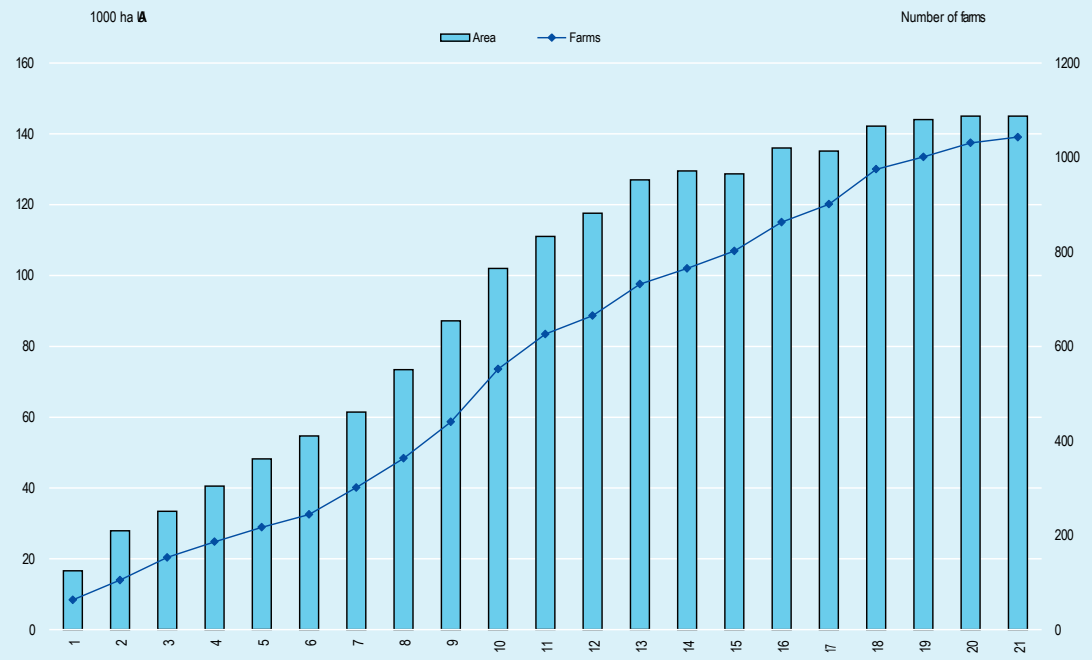
The use of scarce space as a capital investment has led to a sharp

This has led to a rise in land acquisition costs and consequently to an increase in lease prices. As a result, local users and previous extensive forms of land use are often forced out. In addition, the rise in land acquisition prices and lease fees tends to intensify land use, leading to a concentration on the most lucrative crops and farming methods. The production of renewable energy or other changes to cultivated land can also conflict with environmental and nature conservation goals. For this reason, it is becoming increasingly important to weigh up the different interests when drawing up regional and municipal plans. Stronger participation of all stakeholders - from citizens and business to politics, administration and social organizations - offers an additional opportunity to make a contribution to the development of regional and municipal plans.

ly chance to manage such conflicts.

Fig. 11

Development of organic farming in Brandenburg



Source: Ministry of Infrastructure and Agriculture (MIL), Integrated Administration and Control System (IACS), control bodies.

→ **Stronger support for regional initiatives,** for example "pro agro", "von hier", network "Natürliches Brandenburg" as well as targeted consulting and support for small and micro enterprises to build up sales and marketing competencies.

→ **Strengthening of application-oriented research** on biotechnology (biorefineries), on the economic potentials of the bioeconomy as well as on the transfer into practice.

→ **Further development of the National Natural Landscapes as model regions** with a view to the protection of the

Biodiversity and model sustainable regional development with nature tourism and ecologically oriented land use, as well as education for sustainable development.

Field of action 3: Sustainable corporate management as an opportunity for economic development

Targets

The aim is to promote responsible corporate management in Brandenburg in the sense of corporate social responsibility (CSR). Such management ensures that the

sphere of influence of the company - i.e. also in its value chain - is traded in a socially and ecologically responsible manner. This requires a corresponding corporate culture. For the predominantly small and medium-sized enterprises (SMEs) that shape Brandenburg's economy, this represents both a challenge and an opportunity. It is not a matter of creating new bureaucratic hurdles. Rather, it is a matter of understanding environmental and sustainability standards as an econom- ic opportunity. Sustainability management serves the integrative control of social, ecological and economic effects in order to achieve sustainable corporate and business development as well as to ensure positive contributions by companies to the development of society.

Thus, certifications for sustainable tourism offer the opportunity to raise the profile of tourism businesses in Brandenburg and to position itself for economic success.

Environmental Partnership

What is needed is the further expansion and the even stronger

The environmental partnership between the two

companies
state government and industry. This cooperation

serves to promote an environmentally aware and

resource-efficient

The aim is to promote an efficient economy while taking into account the development potential of the economy. It therefore has a special significance. As a platform for dialog, it can help spread the word about sustainable corporate management and increase the proportion of companies with a sustainable approach.

certified environmental or sustainability system to increase. To achieve this, it is necessary to promote the exchange of experience and the transfer of innovative findings.

into practice. It therefore makes sense to profile
The network of innovative experience bearers, of pioneering companies, because this can increase the radiant power in the regional economy.

Entry aids

On the one hand, the aim is to promote practice-oriented information and communication on sustainability management methods and to expand existing initiatives from Brandenburg's universities and research institutions. This applies in particular to small and medium-sized enterprises. On the other hand, the state government can introduce graduated

Entry-level aids to more sophisticated certification sys-

Measures

→ **Establishment of a graduated support system:** This starts with the Brandenburg environmental seal.
of the skilled crafts, goes via ISO 14001 to the environmental management system EMAS and can pave the way to

sustainability management systems. In this way, the entry into certification is facilitated.
tert

→ **Support programs and consulting services,** such as Ökoprofit or EMAS-Easy, can be used in the convoi facilitate the process of joining fully-fledged environmental or sustainability management systems.

→ **Organizational strengthening and further interdepartmental coordination of environmental partner-partnership as a network of innovative experience bearers and pilot companies.**

→ **Economic development:** The state government is examining which measures are suitable for increasing the proportion of
companies with environmental or sustainability management in economic development. It would be possible, for example, to introduce a "corporate environmental management" scoring criterion

→ **Role model of the state government:** EMAS certification of other state authorities is being considered; examined.
The possibility of introducing sustainability management in public administration and creating a program

offer sustainability programs. When selecting projects for funding, it is important to consider how reliable sustainability indicators can be used.
and the definition of minimum sustainability standards.

dards, such as certification, can be included.

Field of action 4: "Good work" and securing skilled workers

Targets

The aim is to ensure sustainable economic development. At the same time, the quality of employment must be ensured and the value of work must be adequately taken into account. Central elements here are the availability and quality of skilled workers and their fair and living wage. In order to attract and retain skilled workers, they must also be paid appropriately and fairly. The gap to wage levels in the western German states remains high. According to the IAB company panel, the average gross wage per employee in Brandenburg was 1,960 euros, while employees in western Germany earned an average of 2,430 euros gross. The rate of adjustment to western Germany was thus 81 percent (see Figure 12).

Employees are increasingly having to meet new requirements arising from the growing dynamism and complexity in all areas of the economy. In order to meet them, new competencies are required as well as the corresponding prerequisites to acquire them throughout the entire educational and professional life. To achieve this, a number of changes in the education system are required (see Chapter 8 "Education for Sustainable Development" below).

Learning on site

Education does not only take place in institutions, but also on site, where people work and do business. There are already a number of approaches to "learning on site" in regional or local educational landscapes in the state of Brandenburg, in which educational institutions, actors, companies and public authorities cooperate fruitfully. In this way, for example, practical experience can be gained in local companies at an early stage, social and economic networks can be established, and local and regional identities can be formed that promote lasting ties to the region.

Fig. 12 **Gross average wage/salary in Brandenburg, East and West Germany - per dependent employee (in persons; excluding employer's contribution and vacation**

Source: Ministry of Labor, Social Affairs, Women and Family (ed.): Report on the Labor Market in the State of Brandenburg 2012/2013, Potsdam, Novem- ber 2013, page 28, Figure 13.

Work quality

The consistent implementation of the state government's "Good Work" model offers a central approach to developing Brandenburg as a sustainable employment and business location. This is because it encompasses equal access to work, to

vocational education and training, the reduction of Unemployment, meeting the demand for skilled workers, fair and adequate pay, humane and healthy working conditions, an intact living environment, better reconciliation of work and family life.

of work, family and care, more security for the individual life planning, especially in the event of changes in working life, as well as an age- and age-appropriate design of work.

Sustainable development of work also means looking at all forms of employment,

This means focusing not only on gainful employment, but also on the entire spectrum of work realities, such as care work and personal work, as well as on gender equality in the world of work. From the perspective of gender equality, this includes: gender parity in the distribution of paid and unpaid work; an increase in the proportion of women in leadership positions; appropriate consideration of different realities of life, especially the importance and security of care work.

This requires a labor and education policy that

→ starts with career orientation, training
The program strengthens the quality and quantity of education and training, increases permeability between education systems and between work and study, and promotes access to lifelong learning through practice-oriented continuing education and training.

→ the labor market relevance of the general and
vocational education and training and to develop
promising
makes occupational profiles attractive.

→ equal access to work and education.
and focuses on all forms of employment.

→ advocating for fair and living wages and the principle of equal pay for the same work in the same place.

→ the circumvention of employee rights by
counteracts precarious employment models.

→ advocate for the equal participation of women and men in working life, including equal pay.

→ Promote the compatibility of work, family and care.
and in view of the demographic change, the
creates the necessary framework conditions through coordinated health, social and labor policies.

→ the demographically induced shortage of skilled workers
by providing young people with good study conditions and attractive jobs, and by taking measures for aging workforces to make work processes age- and age-appropriate.

→ offers concepts to improve the working ability of employees in companies. These include the aspects of health, education, motivation, occupational safety and working conditions.

→ on the creation of jobs subject to social security contributions
The aim is to create jobs and thus stabilize social security systems and safeguard tax revenues.

→ the inclusion of disadvantaged groups ver-
and thus opens up opportunities for social participation.

→ advocate for the participation rights of female employees.
and employees.

Migration as an opportunity

In view of demographic change, there is a threat of secto ral and regional shortage of skilled workers. Brandenburg must therefore be attractive for immigration. The migrants already living in Brandenburg have an above-average level of education; moreover, their average age is lower. As a result, they already represent an attractive potential for the economy.

Intact environment

In order to attract qualified specialists for the
In addition to an excellent research and science landscape and attractive working conditions, an intact natural and social environment is also important in attracting young people into the economy and research and persuading them to stay.

al living environment is important. This includes a high quality of education and childcare, cultural offerings, good health care and a recreational environment that is attractive for leisure activities. However, an adequate culture of togetherness is also indispensable: tolerance toward the newcomers as well as conveying the feeling of being welcome. These so-called soft location factors play a major role in determining whether skilled workers settle in Brandenburg. They are therefore also the focus of a sustainable labor market policy.

Measures*

→ **Introduction of a minimum wage for public procurement by the Brandenburg Public Procurement Act.**
set

→ **Political advocacy at the federal level for federal legislation:** e.g. for the introduction of
a general statutory minimum wage, for equal pay in temporary work and against the circumvention of workers' rights through precarious employment models

→ **Qualification of educational institutions:** These institutions should be in a position to offer future-proof educational content,
to impart technical and practical knowledge, social competence, networked thinking, critical faculties and creative competence

→ **Ensuring early and continuous participation in education**

→ **Raising Brandenburg's profile as a location for "good work"** through consistent implementation of this guiding principle.
of and deepening of the social partner dialog Brandenburg

→ **Improved access to work** for previously disadvantaged groups (e.g., courses of study with dual be-
and Professional School at the BTU CS).

→ **Improved target group-specific information** on funding opportunities for securing skilled workers,
especially for small and medium-sized enterprises and microenterprises

→ **Support for cooperation projects** in regional education landscapes.

→ **Support in the transition from school to training as well as from training and from**
Study into professional practice, for example through the example of the career services at universities

→ **Development of new study formats** for new target groups at universities.

→ **Raising awareness/supporting companies** (especially SMEs), e.g. when introducing new solu-
The company's health promotion and occupational health management (OHM) programs are also part of this program.

→ **Consideration of sustainability criteria in suitable funding programs,** e.g. the ESF-funding period 2014 to 2020 in the promotion of business start-ups, consulting for companies, the Qualification of skilled workers and in integration measures

Field of action 5: Participation in product development, production, consumption and economic development

Targets

Sustainable development is only possible if all stakeholders and actors change their thinking and behavior. At the core of such a change are responsibility, the ability to cooperate, transparency and participation. These competencies are also gaining new significance in economic activity. Numerous targets and

Conflicts of use, that also a Sustainable Ent-development is not free of contradictions. To resolve such dilemmas, more effective communication processes and broader forms of participation can be useful. These include:

→ Early involvement of local authorities and stakeholders.
investment planning with socio-ecological consequences.

→ Stronger inclusion of product-related and
regional economic interest groups in the preparation of entrepreneurial decisions and in regional economic planning

→ Initiation and promotion of discussion processes
about sustainable products and services and their importance for the regional economy. In the interaction between producers, users and regulating institutions, regional markets and value chains can be developed.

→ Establishment of participation-oriented regional

network
(e.g., regional energy clusters).

→ Consideration of alternative organizational
such as cooperatives, citizens' funds and citizens' societies.

→ Structures and steering capacities for coordi-nization of this process

→ Identifying and expanding the design possibilities

of the
The aim of the project is to develop and implement a model for the expansion of co-determination in sustainable product and process innovations within pilot projects.

Sustainable consumption

The so-called buyer power of consumers is one of the decisive factors for the success of sustainable economic activity. Sustainable consumption is therefore a key issue. It requires a high level of knowledge, a strong will to change and a willingness to act. The aim is to enable consumers to increasingly develop an understanding of sustainable consumption, to lead corresponding lifestyles and to develop the corresponding competence to act. It is therefore necessary to explore and develop concrete topics, possible courses of action and approaches to solutions. This is to be done in a dialog process with interest groups and actors involved in sustainable consumption.

Measures*

→ **Development and use of monitoring instruments:** These relate to economic and ar-
The study examines the social, ecological and economic consequences for the country, its inhabitants and its regions. They examine their social, ecological and economic consequences for the country, its inhabitants and regions.

→ **Strengthening the exchange of experience on regional economic issues, building up network-node** for the participation management of sustainable, regional economic development processes

→ **Dialogue** on consumer policy fields of action in sustainable consumption with relevant stakeholders.
and stakeholders as well as interest groups, e.g. consumer protection organizations. Strengthen education policy activities to anchor a sustainable understanding of consumption, with a focus on sustainable nutrition, among other things.

→ **Examine support for cross-thematic networking of politics, business and ge-**
The sustainability community is particularly interested in the transfer of experience and the generalization of successful pilot projects, for example through a sustainability center, sustainability conferences, a sustainability day or week, regional networks and educational landscapes

Further documents on the key action area of business and labor in the Berlin-Brandenburg capital region

Economic policy strategy "Strong for the future - joining forces"
http://www.mwe.brandenburg.de/sixcms/detail.php/bb1.c.175274.de

Cluster Policy
http://www.mwe.brandenburg.de/sixcms/detail.php/bb1.c.174476.de

European Entrepreneurial Region (EER)
http://www.mwe.brandenburg.de/sixcms/detail.php/bb1.c.236855.de

Brandenburg as an industrial location
http://www.mwe.brandenburg.de/sixcms/detail.php/bb1.c.288748.de

Innovative Brandenburg
http://www.innovatives-brandenburg.de

Labor Market Policy Program
http://www.masf.brandenburg.de/sixcms/media.php/4055/ESF_Arbeitspolitisches_Programm_2012_2013.pdf

Securing skilled workers
http://www.mwe.brandenburg.de/sixcms/detail.php/bb1.c.348794.de

Labor policy in Brandenburg
http://www.masf.brandenburg.de/cms/detail.php/bb1.c.188218.de

Environmental Partnership
http://www.umweltpartnerschaft.de

Forest Vision 2030
http://www.mil.brandenburg.de/cms/media.php/lbm1.a.3310.de/waldvision_2030.pdf

Forest Program 2011
http://www.mil.brandenburg.de/cms/media.php/lbm1.a.3310.de/Waldprogramm2011.pdf

Destination Brandenburg
http://www.reiseland-brandenburg.de/

Information from the Ministry of Economic and European Affairs on Brandenburg as a travel destination
http://www.mwe.brandenburg.de/sixcms/detail.php/bb2.c.454920.de

Tourism cluster
http://www.tourismuswirtschaft-brandenburg.de/de/Home

5. Liveable villages and cities

5.1. Initial situation

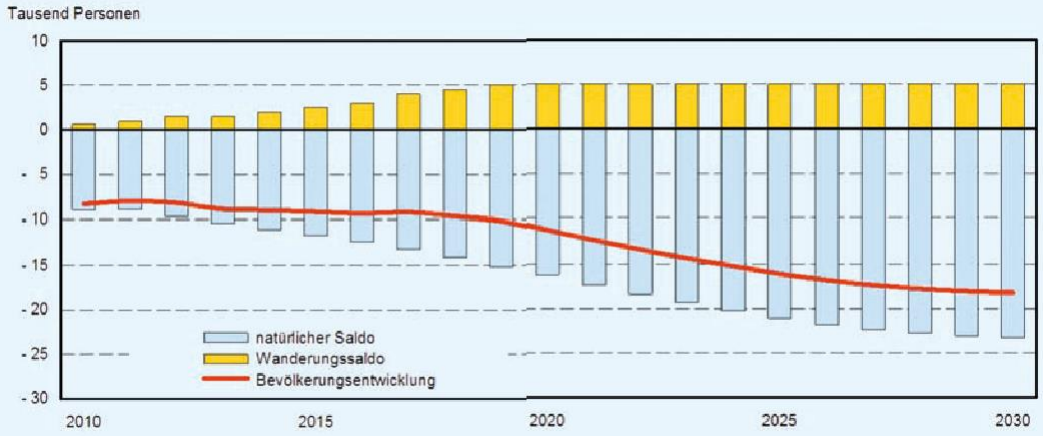
Quality of life refers to the factors that make up the living conditions for an individual in society. It is based on the adequate satisfaction of basic needs, the provision of skills and equal participation in social life.

The initial situation in Brandenburg is essentially-

by demographic change and, in doing so, by the

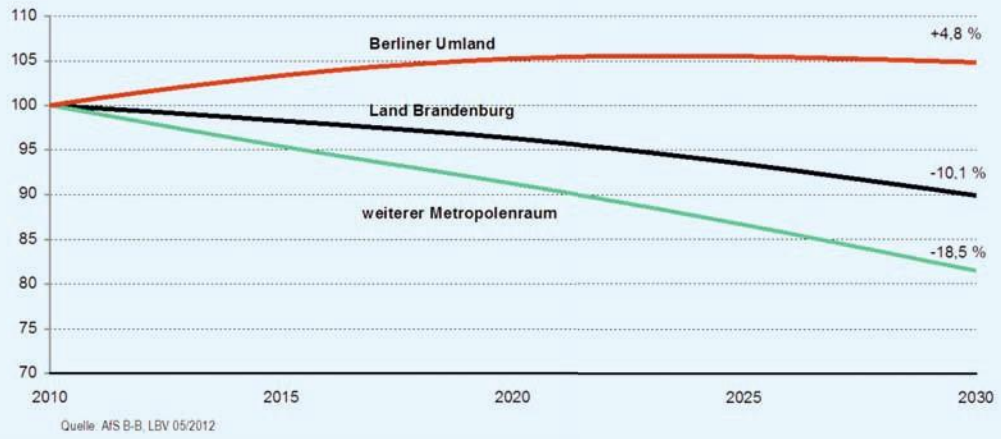
This is characterized in particular by the migration of younger and more able-bodied people from regions far from Berlin. Both factors mean that the already low population density in these areas will continue to fall and the average age will increase. This, however, changes the demand for social, tech-

Fig. 13 **Annual population change in the state of Brandenburg until 2030**



Source: Berlin-Brandenburg Statistics Office/State Office for Construction and Transport, Population Forecast for the State of Brandenburg 2011 to 2030, Potsdam 2012

Fig. 14 **Population change in the state of Brandenburg by 2030 (2010 = 100)**



- Land Brandenburg: -253.000 Personen (-10,1 %)
- darunter Berliner Umland: 44.000 Personen (4,8 %)
- darunter weiterer Metropolenraum: -296.000 Personen (-18,5 %)

Source: Berlin-Brandenburg Statistics Office/State Office for Construction and Transport, Population Forecast for the State of Brandenburg 2011 to 2030, Potsdam 2012

nical and transport infrastructures. On the other hand, the goal is to create equal living conditions. Particularly against the backdrop of the

demographic change, it is necessary to discuss how this

goal is to be achieved under the changed conditions and to be filled with life.

This approach also includes the Berlin-based

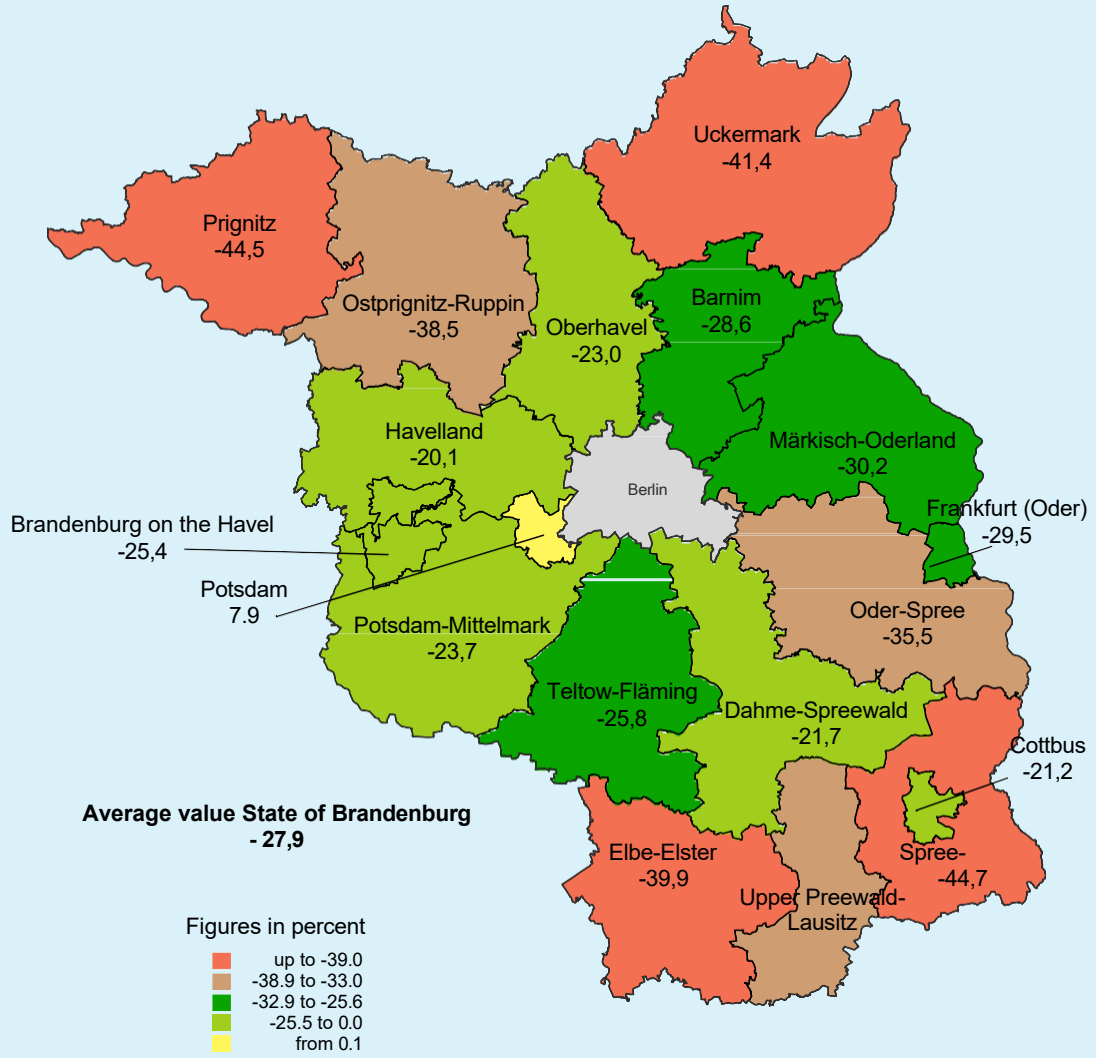
en regions. However, they are characterized by opposing

developments (population growth, spatial densification, high mobility density, comparatively good accessibility of infrastructure services).

According to the 2011 to 2030 population forecast by the Berlin-Brandenburg Office of Statistics, the development of the population between the ages of 15 and 65 will vary greatly in the state's counties and independent cities. Finally, the city of Potsdam can expect an increase. All other counties and independent cities must be prepared for declines, some of which will be high, especially the counties in the wider metropolitan area, which do not have a proportionate county area in the Berlin environs (see the following figure).

Fig. 15

Development of the Population in the State of Brandenburg in 2030 Compared with 2010 in the Age Group 15 to Under 65 Years



Source: Ministry of Labor, Social Affairs, Women and Family (ed.): Report on the Labor Market in the State of Brandenburg 2011/2012, Potsdam, September 2013.

5.2. H andlung needs

The central instrument for achieving equal living conditions is the provision of services of general interest by the state and municipalities. This includes all services in which there is a general public interest. They range from energy and water supply, sewage and waste disposal, police, fire department, hospitals, cemeteries, social housing and public transport to cultural, sporting and social services. The state and municipalities have the task of creating and maintaining sustainable infrastructures, i.e. infrastructures that are also oriented toward local needs. In view of the above-mentioned developments, the challenge is to adapt services of general interest in such a way that they are compatible with local needs.

remains affordable on the one hand and, on the other hand, is also

Brandenburg's regions far from Berlin will continue to enjoy a high quality of life and location.

Against this background, the state government has already taken the following measures, among others: Reorganization of the state planning basis for the "Central Places System", "Urban Redevelopment" master plan, "Small Cities and Communities" support program, expansion of broadband supply, further development of the use of non-medical practice assistants, and the introduction of a new "Central Places" program.

-assistants and implementation of the university development plan until 2025.

Quality of life

Brandenburg's rural areas have potential for successful development due to their rich natural resources, the availability of land, the existence of diverse cultural traditions, and the opportunities for developing and testing new technologies. However, all stakeholders must make a conscious effort to maintain the quality of life here through attractive jobs, a qualitatively and quantitatively sufficient range of educational opportunities, and attractive cultural and recreational offerings in a livable environment, and to manage the transformation of the economy and society, and of the technical and social infrastructure. In view of the increasing financial shortage of the public sector and the expected further rising prices for energy and food pose a particular challenge. Another building block for a good quality of life is social cohesion in society and the greater participation of the local population in the interests of local communities. Organized sports, with their wide range of recreational activities, their vitality and their

and its extensive network of clubs and associations.

The high number of members in all generations and population groups makes a significant contribution to the quality of life in towns and villages and to social integration.

Natural Capital

Nature is one of Brandenburg's most valuable assets. It has a significant impact on the quality of life in our towns and villages and is a major reason for the state's appeal to tourists. This treasure must be preserved for future generations. An essential task is therefore to preserve the biological diversity and the functional capacity of the natural balance and to develop it carefully under the options of change. For this purpose, the Brandenburg program of measures for biological diversity was established. There is also a need for action in the implementation of the European Water Framework Directive.

Infrastructure

If the population decreases, fewer people use the infrastructures, so that their capacity utilization decreases. The problem is that, despite the lower utilization, the fixed costs generally hardly fall at all, if at all, but are distributed among fewer people - for example, in the case of drinking water and wastewater - or reduce profitability, for example, in the case of local public transport or hospitals. For this reason, it is necessary to take an overall view of new construction investments. In addition to the current benefits, this must also take into account the long-term costs incurred during the entire planned service life. At the same time, it must ensure that new structures

be designed in such a flexible way that they can be adapted to the population.

changes in the population. In addition, the overall view must include social and economic impacts.

Concrete examples:

→ Mobility

In view of rising energy prices, climate change

del, limited resources and financial means today's mobility patterns will no longer be sustainable in the future. Work, medical care, education

social contacts, culture, shopping and tourist activities - meeting these needs requires new mobility concepts that must also incorporate the goals of reducing pollutant and noise emissions.

→ Health care

Quality of life is also essentially determined by good and fair health care. In this respect, the needs of people in Brandenburg are no different from those in other regions of Germany: a high quality of care in the event of illness (outpatient and inpatient), the safeguarding of the supply of medicines, the support of all health care professions, fast, close help and effective, attractive offers for preventive health care and rehabilitation. In addition, there is the need to be protected from health hazards and to be protected in crises, as well as to be well informed in order to be able to make competent decisions as responsible citizens. Thus, the state government supports and promotes self-help as a proven form of self-organization "by patients - for patients". The demo-

graphic change also means that in the future a growing number of older people must be cared for and nursed in an appropriate quality. In this context, it should be noted that up to now, care and nursing is ensured by women in the majority.

→ Urban water management

The belief in growth of the 20th century has also been reflected in the concepts and technologies of urban water management: Almost without exception, they are designed for growth, upgrading and expansion. In contrast, there is hardly any experience and solutions for the shrinking processes that have already begun. In addition, the requirements of the new

The challenges of environmental protection and resource conservation have grown and the consequences of climate change have to be managed.

→ Social cohesion

Increasing material and demographic un-

The need for balanced development calls for concepts that help to consolidate solidarity. Rural regions in particular suffer from the impression of being left behind by development. But tolerance is also a basic prerequisite for the future viability of a society. For example, Brandenburg was one of the first German states to anchor a broad anti-discrimination article in its state constitution. This made it a role model and pioneer in Germany. We must continue to work along this path.

Participation

In the future, it will be more important than ever before for local players to take responsibility and contribute ideas and concepts for the common good in order to safeguard services of general interest and improve the quality of life. Politics, in turn, has the task of supporting the realization of such regionally coordinated, practical solutions. Strengthening volunteerism is a good way to make better use of contributions to the common good.

Administration and politics will be given a new role as enabler, moderator, framework setter and initiator of regional processes. This means that informal processes - in the sense of empowering local actors - will increasingly complement planning and funding instruments. On the one hand, this cultural change enables appropriate cooperative solutions on the ground. On the other hand, it strengthens civic and economic participation, the assumption of responsibility, the sense of unity and thus also the appreciation of familiar landscapes.

Legal framework

In order to achieve this, municipalities must make sensible use of their scope for action and decision-making.

can. In principle, it is necessary to develop new approaches and ways of organizing services of general interest and shaping social life in those regions that are affected by the de-

mographic change are particularly affected. The
The state legislature is called upon to provide a sufficient

flexible legal framework.

Conflicting goals

These new approaches and ways to strengthen local and regional scope for action and decision-making, however, also lead to conflicting goals:

→ Regionally adapted solutions increase - in ver-
The new regulations are more diverse and thus less transparent than nationally uniform regulations, and - for the parties involved - they require more coordination. This makes it more difficult to maintain legal uniformity.

→ So-called hard (technical) infrastructure measures-
measures conflict with so-called soft measures, such as networking, participation and education. The same applies to sectoral and spatially oriented planning.

→ Competition between cities, municipalities
and counties for infrastructure facilities, residents and businesses can make necessary municipal cooperation more difficult.

→ The claims for use of land by
The areas of economy, housing, infrastructure, nature conservation, agriculture, etc. are in increasing competition. This is also true for flood protection measures. The importance of cooperative procedures is growing.

→ A positive example of a successful inter-
The first project is the relocation of the dike near Lenzen (Elbe-Brandenburg River Landscape Biosphere Reserve) in coordination with the affected farmers. It serves flood protection and at the same time promotes biodiversity.

5.3. Guideline for "Liveable Villages and Cities" In order to meet the challenges, it is essential to leave behind established routines, create an adapted regulatory framework and redesign processes and organizational structures.

Due to the thematic diversity, a focus orientation is pursued here.

Needs orientation

Planning and measures must be sustainable in the long term and financed in a way that is fair to all generations. The development of analyses of today's deficits and the

and future requirements is useful in order to obtain a reliable basis for decision-making. Both the changed requirements and the aspect of how existing structures can be used sensibly, i.e. at full capacity, must be taken into account. Here

modular and flexible solutions are to be preferred.

Sustainable mobility

The guiding principle of sustainable mobility forms the overarching development framework for all transport policy goals and activities of the state, the federal government and the European Union. The aim is to secure mobility - as a complex process of linking social justice, environmental protection and economic prosperity - for future generations as well. In view of the above-mentioned processes of shrinkage

it is necessary to replace the current mode-specific (sub-)systems of mobility in Brandenburg. What is needed are innovative, sustainable mobility management systems that are capable of meeting the mobility needs of people in all parts of Brandenburg in the long term. The main focus here is on close functional links between the various modes of transport and a high degree of individualized user orientation.

High quality health care

The goal is to achieve comprehensive coverage in all

sub-areas of Bran-
denburg to ensure a high quality of healthcare. To this end, it is also necessary to break new ground. This includes greater cooperation between outpatient and inpatient care and between all those working in the healthcare sector. The ministry responsible for health sees itself as an initiator, moderator and co-designer. It develops its policy in dialog with the following stakeholders: health insurance funds, the Association of Statutory Health Insurance Physicians, the Association of General Practitioners, the State Hospital Association, the State Medical Association and the leading municipal

associations,

Federal Employment Agency, Federal Association of Medical Care Centers, Independent Patient Advisory Service (UPD), etc.

Sustainable urban water management

The aim here is to ensure permanent and affordable access to high-quality supply and disposal services provided by municipal authorities. Affordable means that it must also be affordable for people with low incomes. High-quality services are particularly important if the supply of drinking water and the treatment of wastewater and service water are of high quality, the supply and disposal are secure and natural resources are treated with care.

Social cohesion

Social cohesion arises from an inner sense of belonging based on shared circumstances and commonalities. To strengthen it, inequalities must be reduced or used productively for the community and exclusion must be avoided.

Fields of action

The sustainability strategy of the state of Brandenburg places particular emphasis on maintaining the quality of life in villages and towns. It therefore excludes (for the time being) the area near Berlin from this focus of action. It also concentrates on the areas of mobility, health care and urban water management. Because these cover some fundamental areas of the Brandenburg and require financial support from the state. nancially expensive, environmentally relevant and durable infrastructures. In addition, there is the issue of social cohesion, which was often mentioned in the dialog process.

The following widely discussed topics are also significant for the quality of life in cities and villages, but are not discussed in depth here:

→ Fast Internet connections in rural areas
→ Securing biodiversity and sustainable land use and land consumption.
→ Tourist attractiveness and cultural offerings in rural areas
→ Holistic care and nursing of the elderly; better reconciliation of care and work

Other topics are covered elsewhere:

→ Decentralized energy supply by municipal operators: Chapter 6
→ Development of agriculture: Chapters 4 and 6
→ Educational opportunities and jobs in rural areas: Chapter 8

5.4. H anding fields

Field of action 6: Mobility

Goals

The aim is to create a flexible, demographically stable, future-oriented mobility. It is low-emission and conserves resources. This is particularly true for the future development of rural areas. Making it a reality is one of the most important tasks for securing a location economically and requires the adaptation of legal regulations and, if necessary, a reduction in bureaucracy. This is the only way to maintain and further develop innovative regions and to ensure that jobs, education, leisure and supply facilities remain accessible. Especially for rural areas, train stations and bus stops, the accessibility of services and health care facilities are of great importance. The presence of the public administration in the area should also be maintained. This can be ensured, for example, by mobile citizen services provided by the municipal administration. All of this is indispensable for the economic, social and cultural participation of all population groups in society. At the same time, mobility is a cross-sectional task for the federal government, the states and municipalities, as well as local actors.

New requirements for planning

In order to achieve sustainable mobility in Brandenburg, all modes of transport are needed. It is also necessary to be open to new sustainable developments.

and technologies. Partly because of the demographic (see above), the regional demand for mobility in Brandenburg will develop very differently. On the one hand, the network density of infrastructures will decrease, which will increase the catchment areas. On the other hand, it will become more difficult to bundle the diverging individual mobility needs. Against this background, mobility can no longer be seen as the sum of individual mobility needs.

Define traffic routes resulting from the wishes and activities of public transport authorities, users and stakeholders. This means that traditional transport route planning, which is limited to providing infrastructure, will no longer be sufficient to ensure sustainable mobility in the future. Also the different needs of target groups must be taken into account when designing mobility offers.

Connective mobility

Rather, it is necessary to establish regional, sustainable structures for mobility management. This must be done in the sense of connective mobility,

i.e., customers should be able to access all mobility services via a single interface. This is the only way to develop and maintain attractive, economical, intermodal services along the entire mobility chain (from door to door). Intermodal means that different modes of transport (such as rail, buses and cars) are interlinked / combined.

This paradigm shift makes it necessary,

→ create cooperative structures

→ different actors (companies, private, civically engaged), offers (technically,

tariff) and information (stationary, mobile) with each other. network with each other

→ develop viable, integrative concepts.

These serve to coordinate and network all modes of transport (including alternative forms of mobility) - with their respective advantages - in such a way that they result in a sustainable, traffic-avoiding system,

region-specific overall system emerges.

Integrative specialized planning

In order to establish such a mobility management system, it is necessary to link the planning for settlement development and local public transport and to coordinate them at an early stage. In view of its cross-sectional effect, it is also necessary that the other specialized plans integrate and consider the topic in their area. This means that they must examine how their plans affect sustainable mobility in the region. This is the only way to

Conflicts of interest between the social, economic, and and ecological aspects of sustainability.

and transform them into viable solutions.

lead.

Measures*

In order to realize these goals, it requires a de reorientation of the regional mobility system financial, organizational, and operational aspects of the flank. In order to achieve the overarching cross-cutting objectives To make sustainable mobility management a reality, legal framework. This must include the basic various measures are being examined.

Structural design of sustainable framework conditions:

→ **Reorientation of the perspective:** This must change from public transport to intermodal, post-fossil mobility. expand. This also includes giving greater consideration to alternative forms of service (e.g., on-call bus, patient bus). These forms of service must be strengthened. However, a viable, attractive public transport network must remain the core of future mobility services.

→ **Ensuring the long-term balance** between expected infrastructure demand and the tasks to be performed; in this context, the social circumstances of mobility customers are to be taken into account in such a way that mobility services are also affordable for people with low incomes

→ **Permanent establishment and financing of flexible forms of service,** such as on-call buses or ride-sharing systems. teme

→ **Developing approaches to optimize and communicate existing offerings,** such as at the Fast and scheduled traffic or tourist excursion traffic

→ **Qualification of transport companies as sustainable mobility service providers** for the different target groups in the region, e.g. through the use of intermodal buses.

Develop innovative and integrative adaptation strategies:

→ **Further development of local transport plans** as a steering instrument between passenger interests, economic and social interests. and public interest

→ **Integrated consideration of the availability of means of transport and the distance travelled,** esp. of the social infrastructure sites, in particular

→ **Consideration of innovative, sustainable supply strategies in order** to achieve the finely tapped Nahmobility

→ **Reduction of freight transport by expanding and strengthening regional supply structures. tur**

→ **Increased shift of interregional and international freight transports to sustainable infrastructures (e.g. waterway, rail)**

→ **Development of intermodal mobility chains and the associated optimization of Interfaces (transfer options, bus shelters)**

→ **Expansion and improvement of the non-motorized radius of action,** for example through pedelecs. and bike paths

→ **Flexible filling of supply gaps,** for example through car sharing, commuter networks and other partial actions, Combined buses, disco buses, shared cabs or ride-sharing services

→ **Development of excursion destinations with public transport or other alternative forms of service with proportional financial participation of the tourism industry**.

→ **Identifying and approaching local mobility partners,** for example to combine Passenger and freight transport

→ **Reconciliation of** the **various demands of** users and duty bearers under Consideration of the welfare state objective.

→ **Involving the creative, innovative skills and potential of** local people, e.g. through Strengthening of voluntary work and promotion of private initiatives, such as neighborly assistance

Field of action 7: Urban water management

Objectives

Urban water management encompasses the handling of drinking water, process water, wastewater and riprap. It is an indispensable component of public services. The existing infrastructures are designed for long-term, cross-generational use. At the same time, they embody a considerable capital commitment. Based on the developments described above (under 2.1. and 2.2.), the following sustainability goals emerge for Brandenburg:

High quality of drinking water supply and wastewater disposal

The primary objective of urban water management is to ensure a safe, high-quality supply of drinking water. Similarly, wastewater is to be treated in an environmentally friendly, resource-conserving and hygienically sound manner in accordance with legal requirements and the recognized rules of technology and returned to the natural water cycle in a purified state. Both services are to be provided nationwide in an affordable manner and in line with demand, also for people with low incomes. In the future, the following principles are to be more strongly observed:

→ Keep energy use low, gain energy / regain

→ Water use by purpose un- terse

→ Separate collection of different wastewater streams. sen and derive

→ Separate and recycle wastewater constituents. win

Good water condition

Flowing and still waters serve as habitats and migration routes for numerous animal species. The same applies to the floodplains of rivers and streams. This makes them of great importance for biological diversity. At the same time, clean water is a decisive factor for the production of drinking water. Furthermore, clean waters are key factors for the recreational value of landscapes. This results in the need for an ecologically, chemically, and humanly sound water supply.

The precautionary principle, according to which the emission of pollutants into the water cycle is to be prevented at source, is an integral part of water law. The precautionary principle, according to which the emission of pollutants into the water cycle should be prevented at source, is an integral part of water law.

Appropriate organizational structures

Urban water management is one of the tasks of local self-government and is mainly performed by special-purpose associations. In the federal state of Brandenburg, special-purpose associations - especially in the rural structures with a low population

- a suitable form for centralized and area-based effectively operate extensive facilities. There are close interrelationships between the technical and institutional structures. Structures with a large number of members usually have a higher level of expertise and can therefore control more complex processes. It should be borne in mind, however, that coordination and decision-making processes often slow down in larger institutions. In addition, citizens often feel more comfortable with larger institutions.

identify less. The supposed loss of Transparency and closeness to citizens in larger structures can be counteracted by problem-conscious communication at the municipal level. It follows that the structures must be considered in the light of the specific tasks. In doing so, the op- timum of decentralization or centrality must be determined individually in order to form strong local structures that are sustainable in the long term. Cooperation between municipalities can help to find flexible solutions and to reduce the risics of the individual partners.

Conflicting goals

However, the aforementioned goals also harbor conflicting objectives.
These include:

→ Competing claims for use between Man and nature

→ Use of the treated wastewater (re-use) of a- on the one hand, and preventive soil and groundwater protection on the other (e.g. in the case of small sewage treatment plants).

→ Liberalization of the water industry through Euro- European law vis-à-vis publicly organized services

of general interest that ensure high drinking water quality and basic sanitary services.

Measures*

→ **Development of a model for** the gradual adaptation of the current drinking water supply systems.
(transformation process for the water infrastructure) together with the local authorities, the professional associations of the drinking water and wastewater sector as well as representatives of local politics (association assemblies of the special-purpose associations).

→ **Support for measures** that serve to strengthen the **economic capacity of the municipalities.**
(State initiative for voluntary comparison of key figures for drinking water supply and wastewater disposal).

→ **Identification of obstacles in technical regulations** regarding the use of simple technologies. In addition, there is the examination and formulation of opening clauses.

→ **Flexibilization of drainage infrastructures to adapt to heavy rainfall events, the go hand in hand with climate change**

→ **Implementation of the programs of measures under the Water Framework Directive**

→ **Designation of priority areas for drinking water production as a mandatory spatial planning requirement.**
feature in state and regional planning.

Field of action 8: Health care Objectives

The goal is to ensure good health care coverage throughout the country.
supply. This requires appropriate framework conditions. A large part of this is the responsibility of the federal government. The state of Brandenburg is committed to strengthening the states' ability to shape medical care. At the same time, it advocates that the necessary legislative
to initiate steps to achieve comprehensive,
to ensure good basic care. This includes, for example, measures to improve the attractiveness of working as a family doctor.

Areas of action

The challenges facing Brandenburg in terms of health policy also open up the opportunity to explore new, sustainable paths. This also includes making greater use of existing potential. Together with the institutions and representatives active in the health sector, the state government has developed a corresponding concept. It provides for the following fields of action:

→ Securing skilled workers for the health care sector.
care: This includes, in particular, recruiting sufficient numbers of young physicians.

→ Strengthening the role of professionals who are physicians
and doctors can relieve

→ Expansion of telemedicine

→ Development of integrated and multidisciplinary Supply concepts

→ Change in demand planning: This is to be based more on the specific need for care rather than on Orient ratio figures.

→ Ensuring the provision of care by contracted physicians

→ Creation of attractive living and working conditions. for the medical staff

→ Strengthening the rights of patients
ten

→ Strengthening of prevention and health promotion
ration through alliances for health goals.

The Berlin-Brandenburg Health Region Master Plan also refers to these fields of action and aims to permanently establish a strong and interconnected health region. On the basis of innovative concepts, high-quality care for citizens in all parts of Brandenburg is to be guaranteed in the future.

Measures*

→ **Further modernization of hospitals:** To this end, among other things, the financing of hospital
The new structure of the Group's head offices will reduce the need for administration and increase the scope for decision-making.

→ **Information and image campaign to attract physicians, especially family physicians.**
and primary care physicians: This campaign continues to evolve (www.arzt-in-brandenburg.de)

→ **Increased cooperation between Charité Berlin and Brandenburg hospitals:**

This should help to familiarize future physicians with career prospects in the state of Brandenburg.
to introduce

→ **GLG scholarship programs for aspiring physicians:** These programs of the
Municipalities or municipal hospital operators are to be continued

→ **Establishment of continuing education networks:** The corresponding programs of various organizations sol-
len be expanded and continued

→ **Establishment of nationwide telemedical networks** for patients with heart failure.
as well as for the care of strokes

→ **Further support for medical care centers** by the state government; same applies
also for other forms of cooperation in integrated and cross-sectoral medical care.

→ **Further support for physician-relief professions such as the AgnES concept** (physician-relief, community-
den-based, e-health-based, systemic intervention), case management, and practice assistance models.

→ **Promoting the settlement of physicians** in underserved rural regions with the help of
of the European Agricultural Fund for Rural Development (EAFRD)

→ **Maintaining and improving attractive working and living conditions** in Brandenburg cran-
hospitals and medical care centers in all parts of the country.

→ **Consolidation of the Independent Patient Counseling Service** in Brandenburg, transparency about reasons
for counseling

The implementation of these measures requires all those working in the healthcare sector to act together. Motivation, cooperation and transparency also play a major role here. In addition, the appropriate framework conditions must be in place. Creating these is a priority for the state government.

Field of action 9: Social cohesion

Objectives

The aim is to maintain and further strengthen social cohesion in society. This applies to solidarity within and between generations as well as with the weaker members of society. This requires acceptance and tolerance, especially in the integration of people with a migration background. A

Strong social cohesion often also has a
positive impact on the economy and ecology.

→ Equality between men and women
The Brandenburg Gender Equality Policy
Framework is intended to promote gender equity
in all areas of society and politics and help to eliminate structural ge-
to reduce gender-specific disadvantages.
en. Good life prospects - especially through better access to the labor market - counteract further migration, especially of young women from regions far from Berlin.

→ Older people
The aim is to develop realistic ideas about old age and to prevent the unequal treatment of older people. At the same time, the framework conditions for their more active participation in social life must be created. Participation in social life, success and recognition can decisively increase the quality of life of older people and thus contribute to maintaining their mental and physical strength. In addition, they must be supported in
to maintain their social networks, the eld-

The state government has introduced a package of measures to ensure the safety of senior citizens. With this goal in mind, the state government has enacted a package of measures for senior citizens.

→ People with disabilities
In order to implement the UN Convention on the Rights of Persons with Disabilities, the interests of people with disabilities must be taken into account throughout. To this end, the state of Brandenburg has adopted a package of disability policy measures.

→ People with a migration background
Integration policy must ensure that social, economic, legal and administrative barriers to integration are removed and that the social participation of immigrants is promoted.

→ Strengthening the economic power of rural areas
Strengthening the links between farmers and farmers' associations.
food production and forestry, as well as research and innovation; Er-
facilitation of diversification, establishment and
Small business development and job creation; promotion of local development in rural areas.

→ New forms of sharing and joint use (share economy).
In villages and smaller towns, life is less anonymous. People take more
share in each other and share more frequently. This spares
the environment, saves costs, unlocks potential for value creation and strengthens the community. These advantages must be maintained and expanded (see also Chapter 4).

→ Strengthening of the honorary office
The willingness to take responsibility for the common whole or for specific issues is the basis for cohesion in society. It is important to encourage local people to get involved in their community, for example by participating in planning and politics in their municipality, or through social or ecological volunteering. This also increases people's identity with their region.

Measures*

→ **Improvement of communication within the municipality and with the administration.**
tion, for example by promoting village community centers and reactivating local centers as well as suitable communication platforms, also with new media; creation of suitable broadband structures to improve network accessibility.

→ **Support of grown projects and new initiatives to overcome or reduce Discrimination, fear of contact, disadvantages or exclusion**

→ **Establishment and support of communal, intergenerational forms of living.**

→ **Creation of offerings and structures to strengthen and empower civic engagement.**
gements by supporting sustainability networks such as local LEADER action groups and village movements ("Day of the Villages") or supporting regional consumer protection structures.

Further documents on the "Liveable villages and towns" action priority

Joint Berlin-Brandenburg State Planning
http://gl.berlin-brandenburg.de/index.html

Information from the Ministry of Infrastructure and Agriculture
http://www.mil.brandenburg.de/cms/detail.php/bb2.c.449516.de

Information from the State Office for Construction and Transport
http://www.lbv.brandenburg.de/index.html

Information on regional development
http://gl.berlin-brandenburg.de/regionalentwicklung/index.html
http://www.stk.brandenburg.de/cms/detail.php/bb1.c.170176.de

Rural Development Information
http://www.mil.brandenburg.de/cms/detail.php/bb1.c.196613.de

Information on urban development
http://www.mil.brandenburg.de/cms/detail.php/bb1.c.114069.de

Information on mobility
http://www.mil.brandenburg.de/cms/detail.php/bb1.c.130831.de

Health Care Information
http://www.stk.brandenburg.de/cms/detail.php/bb1.c.170170.de
http://www.mugv.brandenburg.de/cms/detail.php/bb1.c.283178.de

Information on water protection and water management
http://www.mugv.brandenburg.de/cms/detail.php/bb1.c.283559.de

6. Brandenburg as a model region for energy transition and climate adaptation

6.1. Initial situation

Compared to the reference year 1990, Brandenburg reduced its energy-related CO_2 emissions by 34.6 percent to currently 59.5 million tons. The deindustrialization of large parts of Brandenburg in the first half of the 1990s, the extensive renovation of buildings and heating systems, the development of a modern economy and the structural change in the energy industry all contributed significantly to this reduction. The state's goal is to reduce its energy-related CO_2 emissions to 25 million tons by 2030.

Since 2010, however, energy-related greenhouse gases have risen steadily again. Compared to other German states, Brandenburg has a low energy productivity and the manufacturing industry is characterized by a comparatively high energy intensity. Lignite-fired power generation, which has a long tradition in Lusatia, still accounts for about 65 percent of the state's total CO emissions.[2]

Around 75 percent of the electricity required here can already be provided from renewable energies generated in Brandenburg.

be provided. However, since volume and demand are subject to fluctuations, so that the demand for e. g.
often not possible due to the lack of storage
can be covered, the actual utilization rate is lower. However, the energy policy goal is not to make Brandenburg self-sufficient in energy. As a significant contribution to security of supply and grid stability in Germany, Brandenburg exports about 60 percent of the electricity generated here as well as -
to a roughly equal extent - refinery products.
In order to achieve the energy and climate policy goals, the state government also wants to increase the share of renewable energies in the heating and transport sectors.

Climate change

The weather observation of the last years as well as the results of the available climate models show that the range of precipitation patterns as well as the average temperatures are steadily increasing. Scenarios provide insight into the range of possible impacts. The consequences of dry periods, intense heavy rainfall, flooding, high temperatures,

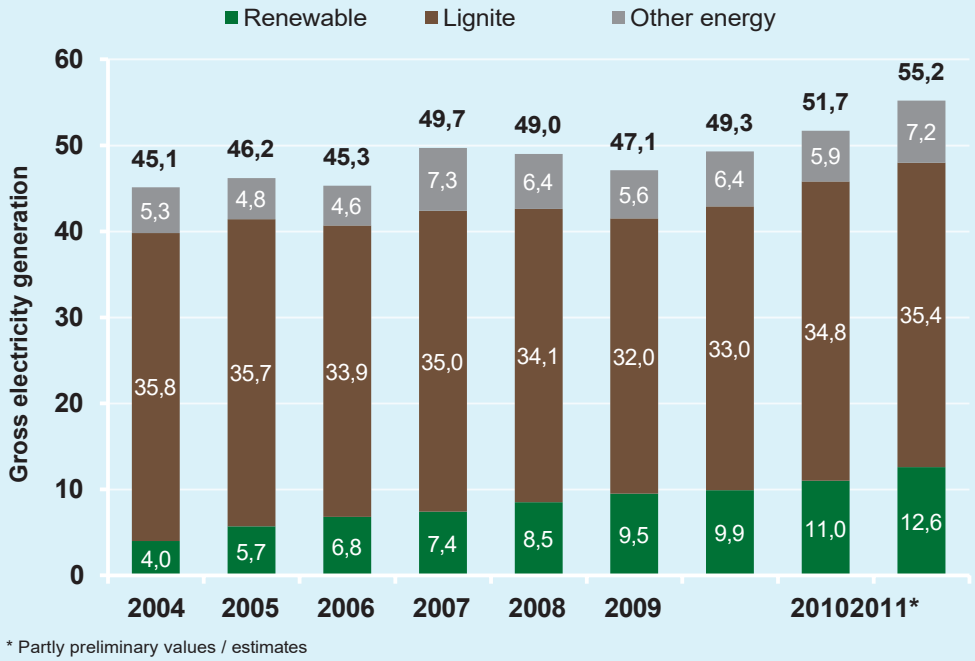
The persistent heat waves and changes in storm parameters require corresponding adaptations.

A successful energy transition in Germany and an active pioneering role on the part of the EU could also be an important stimulus for global climate protection.

Measures already taken

Central building blocks for the sustainability strategy are the "Energy Strategy 2030" and the "Catalog of Strategic Measures of the "Energy Strategy 2030" from 2012 as well as the "Report of the State Government on the Implementation of the Catalog of Measures for Climate Protection and Adaptation to the Consequences of Climate Change" from 2011. In addition, the state has formulated strategies and goals for various individual areas. An example of this is the biomass strategy of 2010, which was formulated as part of the implementation of the
"Energy Strategy 2030" is being continued. In addition, there are measures from other programs, such as that for the protection of biodiversity.

Fig. 16 **Development of gross electricity generation by energy source in the state of Brandenburg**



* Partly preliminary values / estimates

Source: Brandenburg Economic Development Board, 4th Monitoring Report on the Energy Strategy of the State

Expansion of the "Energy Strategy 2030

With the energy turnaround, the focus of energy policy activities in Germany is currently on the electricity sector,

energy efficiency and in the transport sector.

and to present them in a more differentiated way in order to also leverage these potentials and achieve goals. Within the framework of the implementation and further development of the "Energy Strategy 2030", the system integration of renewable energies as well as the systematic linking of all energy sources and an intelligent control of the overall system (convergence) are to be achieved. It is also necessary to extend the time dimension of the strategy - analogous to the higher-level concepts of the federal government and the EU, for example - to 2050. These envisage reducing greenhouse gas emissions by 80 to 95 percent by 2050 compared with 1990 levels.

As described above, Brandenburg is an energy exporting state and thus makes a significant contribution to security of supply in Germany. The export is to be des-

will continue to take place in the future. In the design of the

energy policy of the future, regional interests must be better coordinated with each other (especially Brandenburg with the state of Berlin and the federal government).

Land use conflicts

Numerous forms of land use have a negative impact on biodiversity. Among other things, mining, renewable energy production, and pipeline-generated

The transport of energy in this way leads to conflicts in the land

use. It is therefore necessary to find solutions here.

find that serve the overall interest of the country.

6.2. Need for action

The fields of action climate protection, energy transition and adaptation to the consequences of climate change are interdependent. At the same time, they are interrelated with the area of

"Biodiversity and Land Use". The same applies to the other topics of the sustainability strategy, in particular "Economy and Work in the Berlin-Brandenburg Capital Region" and "Biodiversity and Land Use.

"Liveable Villages and Cities.

In the long term, the perspective of a low-carbon economy must be demonstrated,

which must be expanded to include related fundamental societal changes ("low carbon socie- ty"). In this context, promoting the acceptance of low-CO_2 lifestyles and behaviors in companies and in people's everyday lives is of central importance.

Key questions and challenges are:

→ How can the Energy Strategy 2030 be integrated into the How will the energy sector develop in the coming years from a national and European perspective in order to meet the challenges of the energy transition?

→ Is it necessary to extend the catalog of measures of the Country- and department-specific management What is the best way to further develop adaptation concepts in line with the German Adaptation Strategy (DAS)?

→ How can a balance of interests be achieved between conceptual design to meet the requirements arising from the energy transition and land use?

Energy efficiency and energy saving

The state government's "Energy Strategy 2030" the need for action in energy efficiency and energy savings have been made clear. The same applies to meeting the climate protection target. The necessary efforts in this regard, as well as the numerous sub-goals, which in turn serve to achieve the main goal, must be discussed in greater detail and, if necessary, supported by programs of measures.

Lignite-fired power generation

The dynamics of the energy turnaround and technological progress, especially in the areas of transformation to a renewable energy system and the further development of climate protection mechanisms, will also determine the duration of the continued use of lignite for power generation. It should be noted that the lignite industry is of economic and social importance in Lusatia.

From today's perspective, flexible conventional Power plants for a transitional period - to ensure a secure and affordable electricity supply.

The use of lignite-fired power plants as a supplement to renewable energies is also essential. The latest generation of lignite-fired power plants, or plants that have been modernized accordingly, are also suitable for making a contribution to this. Climate protection technologies, such as the capture of CO_2 (and its storage or use), must be examined to determine whether they can be used in the foreseeable future - even outside the energy industry - and what their impact on sustainability will be. It is important to note that, if lignite-fired power generation is maintained at the current scale, there will be no need to

without a significant reduction in the number of employees involved.

CO_2 emissions - the climate protection targets of Brandenburg cannot be achieved.

As part of the ongoing lignite plan procedure for the Jänschwalde-Nord opencast mine, the state government will make a decision on the necessity of the mining area from a regional planning perspective. The prerequisite for this is a prior corporate decision to build a follow-up power plant based on technologies for low-CO_2 generation at the Jänschwalde site.

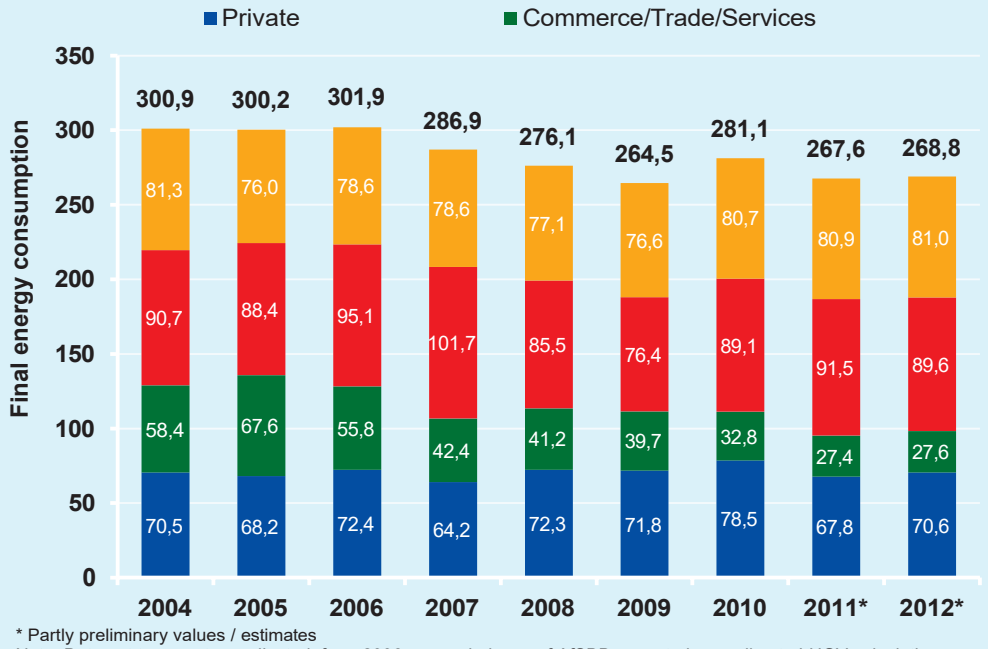
Mobility and housing

Both areas have a key role to play in the energy transition. Mobility can no longer be reduced to transport. Instead, mobility needs must be satisfied. Preferably, low-emission and zero-emission drive systems should be used and the share of such modes of transport that have low climate gas emissions should be increased (see field of action 6). The issue of housing can no longer be viewed solely in terms of construction. Instead, housing must be realized in a more ecological and welfare-oriented way in the future: through lower energy consumption and the use of renewable energies, low-emission heating systems and new energy storage systems. Neighborhood-based concepts and integrated urban development will be of particular importance in this context.

Customization

Adaptation to the consequences of climate change requires that decision-makers and planners be permanently sensitized to the issue. The necessary adaptation measures and

Fig. 17 Development of final energy consumption by sector in the state of Brandenburg



* Partly preliminary values / estimates
Note: Data not temperature-adjusted, from 2006 energy balance of AfSBB corrected according to LUGV calculations.

Source: Brandenburg Economic Development Board, 4th Monitoring Report on the Energy Strategy of the State of Brandenburg.

the associated implementation strategies must therefore be established as continuous processes. Climate change does not occur in a linear fashion; parameters, temporal shifts and ranges of fluctuation are constantly changing. Both climate change and its consequences can be estimated. However, it is only possible to draw realistic pictures of future conditions to a limited extent. Society must learn to adapt to new situations, as climate change can lead to concrete threats. It is the task of the state to protect the community from dangers. This is especially true when adaptation measures taken by the individual (may) endanger the community or others, or when the search for community-friendly solutions requires a confrontation with different individual interests.

eating and conflicts of use is necessary.

6.3. Guideline "Model Region for Energy Transition and Climate Adaptation

In its Energy Strategy 2030, the state government developed the following strategic elements to guide it in pursuing its goals:

→ Increase energy efficiency and reduce energy consumption
ren

→ Share of renewable energies in the energy supply increase use

Reliable and low-cost energy supply → Energy efficiency
Ensure

→ Reduce energy-related CO emissions$_2$

→ Regional participation and, as far as possible Create acceptance

→ Stabilize employment and value creation

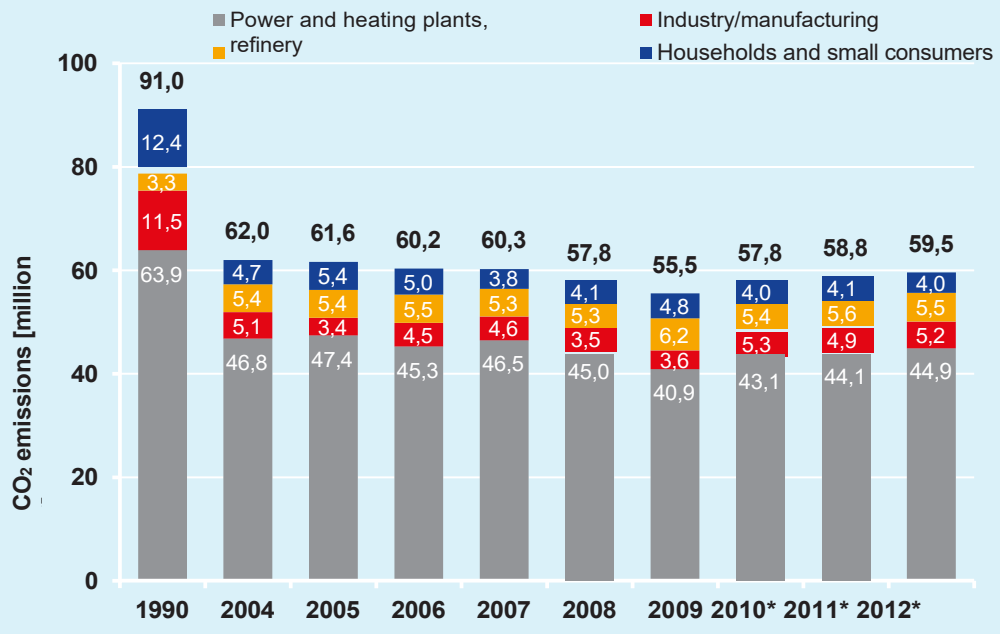
Special challenges result from the requirements for climate protection and adaptation to climate change.

Climate protection policy cornerstones for the energy turnaround:

→ largely CO_2 -free power generation by 2050

→ largely CO_2 -free heat supply in the Residential sector by 2050

Fig. 18 **Development of energy-related CO_2 emissions by sector in the state of Brandenburg**



* Partly preliminary values / estimates

Source: LUGV, Climate Gas Inventory 2012 for the State of Brandenburg

The following aspects are important for adaptation to climate change:

→ Climate change has long since begun and is screaming
People, society and infrastructure have to adapt to larger changes in climate and weather,
fluctuations and changes that are difficult to predict.
tions.

→ Protection of important ecosystem services for climate
and water balance

→ Adaptation of land use to climate change
to stabilize the local climate and water balance and to protect against the effects of extreme events.

6.4. Fields of action

Field of action 10: Energy and climate protection (Energy transition)

Targets

A policy that aims to align the management of energy and climate change with the guiding principle of sustainability must take sufficient account of the complex interactions between the following objectives: security of supply, economic efficiency of energy supply, regional value creation, environmental and climate protection, social effects and acceptance. In this context, the following objectives are aimed at:

→ Reduction of per capita CO_2 emissions by 2050 to today's average global level

→ Reduction in carbon input and increase in carbon emissions.
The aim is to increase the use of renewable energies for the supply of electricity, heat and mobility. The goal is to establish a largely carbon-free energy supply by 2050.

→ Reduction of energy consumption as a core element
a reliable and inexpensive energy supply

→ Target-group-specific regional participation of the population

→ Utilization of regional employment and value
potentials, e.g., through a decentralized energy supply.

→ Fair sharing of the benefits arising from the energy turnaround
The aim is to reduce the temporary burdens that result from this; to give greater consideration to the interests of consumers.

To achieve these goals, it is necessary to implement the following projects in the medium and long term:

→ more demand-oriented and landscape-friendly Grid expansion

→ Expansion of a wide range of storage technologies, also via Across system boundaries

→ Use of high-efficiency and flexible power plant technologies

→ Multiplication of electromobility

→ Multiplication of solar heat utilization.

→ Multiplication of the use of environmental heat.

→ Technology transfer and support for networking tion to development cooperation in the field of renewable energies and climate protection.

Indicators

In the field of action energy and environmental protection, there is already a very distinctive indicator system; see the monitoring reports of the Future Agency Brandenburg (ZAB) on the Energy Strategy 2030 as well as the climate gas inventories of the State Office for the Environment, Health and Consumer Protection (LUGV). The sustainability strategy should focus on the core indicators that achieve the above-mentioned goals.

reflect. Such core indicators include at- example:

→ Energy productivity and economic growth (ratio of primary energy consumption to gross domestic product)

→ Raw material productivity (ratio between raw Raw material extraction/imports and gross domestic product. product)

→ Greenhouse gas emissions (specifically: the six Kyoto gases in CO_2 equivalents as well as specifically energy-related CO_2 emissions, total and by individual polluter sectors)

→ Share of renewable energies in the energy supply consumption (including their share of gross electricity consumption, final energy consumption, and primary energy consumption).

Conflicting goals

When implementing the previous sectoral strategies, which are limited to individual areas, show

numerous conflicts of interest arise. In the context of sustainability

The aim of our business strategy is to mitigate these risks.

Concrete examples:

→ Coal-fired power plants and climate protection

The high utilization of lignite-fired power plants, which is still necessary to ensure a secure and affordable supply, is associated with high climate gas emissions. Added to this are the ecological follow-up costs of lignite extraction and lignite-based power generation, as well as costs arising from resettlement. Lignite mining means further large-scale interventions in the landscape and the water balance and can impair water quality, especially due to the acidification of water bodies caused by mining.

Groundwater and surface water, deteriorate.

→ Renewable energies and biodiversity In principle, measures that contribute to the climate

The use of renewable energy sources to mitigate climate change is also beneficial for the protection of biodiversity. However, the

Conflicts arise when the expansion of the renew-

The aim of the project is to develop a new energy system that competes with other uses of renewable energy. This applies - in addition to the

for ground-mounted photovoltaic as well as for

ground-mounted

Wind turbines and distribution grids - also

for the cultivation of energy crops. Therefore the to further develop and implement good agricultural practice in such a way that at least

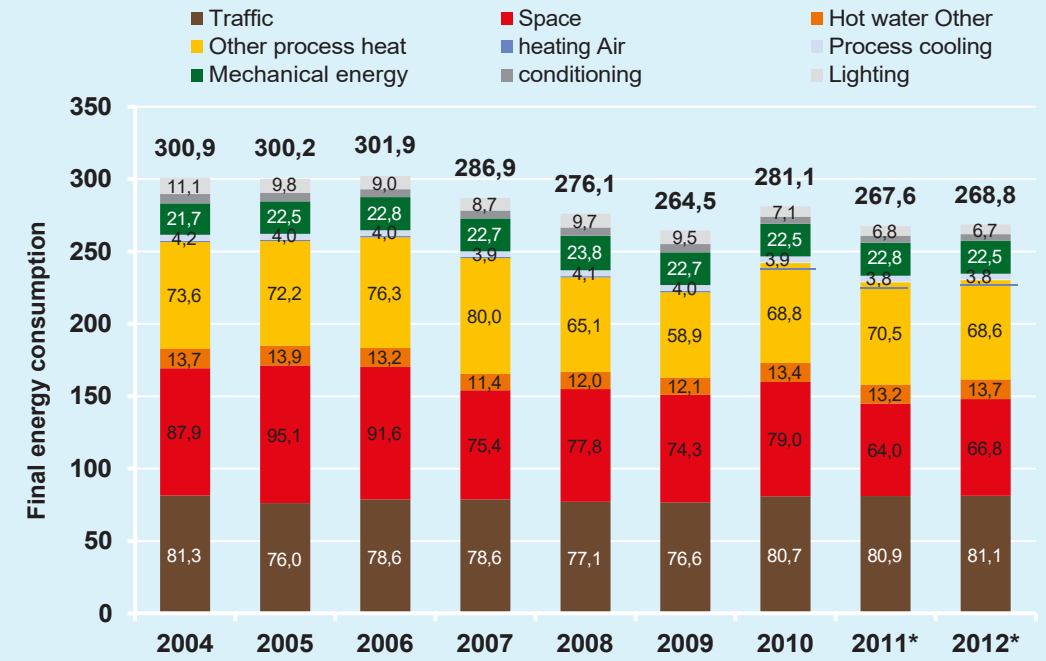
a tripartite crop rotation takes place and a humus balance is achieved. It is also particularly important that permanent grassland is preserved on absolute grassland sites. Fringe structures, copses, extensively used grassland

Arable land and fallow land are prerequisites, to maintain biodiversity in agro-ecosystems. The energetic use of landscape

material, the cultivation of perennial, extensively

The use of cultivated crops, such as energy wood and perennials, as well as the creation of flowering strips offer opportunities that should be exploited more intensively. In order to reconcile the goals of the Energy Strategy 2030 in the area of wind energy with the requirements of nature conservation, the state government has developed "Animal Ecological Distance Criteria"

Fig. 19 **Development of final energy consumption by application purpose in the state of Brandenburg**



* Partly preliminary values / estimates Note: Data not temperature-adjusted

Source: Brandenburg Economic Development Board, 4th Monitoring Report on the Energy Strategy of the State of Brandenburg.

of areas suitable for the use of wind energy and to take into account nature conservation concerns when approving wind power plants. These criteria must be regularly adapted to current requirements and findings. It is also necessary to take the following into account when erecting

The use of ground-mounted photovoltaic systems is the eco-

The project must take into account the logical, natural and cultural landscape conditions.

→ Social impacts of the energy transition

The expansion of renewable energies and other measures to protect the climate have had a ver different financial implications. While the restructuring of the energy supply system and climate protection measures in the case of macroeconomic

While the expansion of renewable energies as a result of the EEG may lead to considerable cost savings in the medium and long term, consumers may be temporarily confronted with rising prices, which may exceed their individual capacity in individual cases. In addition, it is becoming increasingly clear that the expansion of renewable energies promoted by the Renewable Energy Sources Act is associated with a considerable redistribution of wealth from the bottom to the top. When designing energy policy instruments, such social effects must be taken into account and, if possible, compensated by appropriate measures. In addition to measures to improve the Energy efficiency and energy saving comes great importance to equitable burden sharing.

Measures*

The "Catalog of Strategic Measures" for the Energy Strategy 2030 and the "Catalog of Measures Climate-protection and adaptation to the consequences of climate change" already define numerous activities. These will be continued independently, but will be taken into account in the interim results of the sustainability strategy.

These measures include:

→ **Designation and communication of necessary energy infrastructure measures,** in particular construction/. Decommissioning of power plants, expansion of grids and renewable energies, construction of energy storage facilities

→ **Increased awareness and information of the population; organization of a credible, continuous participation process** for the energy strategy

→ **Strengthening the economic participation of** broad social groups (e.g. via cooperatives). tions), if necessary by means of state policy measures.

→ **Revision of the biomass strategy while maintaining the** following principles in the order of priority: food security before material use before energy use of biomass; support for sustainable, energy-efficient biomass use, attention to the ecological carrying capacity of landscapes.

→ Continue **opportunities to increase energy efficiency** in all funding areas, for new programs. Introduce and anchor in the cluster strategies

→ **Further measures:** Participation in shaping the energy turnaround and reforming legal Setting the framework for the energy industry, e.g., the **Renewable** Energy Sources Act (EEG), and the Energy **Industry** Act (EnWG) at the federal level

→ As new findings become available, the state government will, as part of the evaluation of the energy tra-. Examine whether the **Energy and Climate** Strategy 2030 should be **further developed** into an **energy and climate protection strategy** or whether specifications should be made within the framework of a **climate protection law.**

→ **Development of a specific mission statement for the BerlinBrandenburg energy supply system.**

→ **Support for local and regional initiatives,** in particular raising the profile of role-model projects and communities

→ **Increasing regional value creation in the energy industry** towards (as far as possible) full Value chains

→ **Strengthening the role of regional planning** in resolving land use conflicts.

→ **Support for the development and implementation of municipal and neighborhood energy and climate policies.**
and climate protection concepts

→ **Further development and implementation of good professional practice and other guidelines** in the Agriculture

→ Preservation and expansion of natural CO_2 sinks: **Increased implementation of the program for offsetting of greenhouse gases for peatland rewetting (MoorFutures).**

→ **Continuation of forest restructuring**

→ **Development of schools and educational institutions** into energy and ecologically exemplary Learning sites

→ **Promotion of a graduated development of low-emission and zero-emission vehicles.**
and mobility offers

→ **Improve the information base as well as communication** on the impact of facilities for the Use of renewable energy sources on biological diversity

→ **Analysis of the** country's **existing legal framework with** regard to its effect in the In terms of the goals of the energy transition

→ **Internationalization of efforts**

- by promoting cooperation between Brandenburg's business community and the develop-

  cooperation on projects to promote renewable energies, improve energy efficiency as well as climate protection,
- by developing products that provide innovative solutions for a decentralized energy supply offer, especially for developing and emerging countries
- through international climate partnerships at the municipal and local level, as well as through a promo networking and the transfer of knowledge.

→ System transformation measures

The state's Energy Strategy 2030 already contains the first concrete steps toward integrating renewable energies into the overall system and coordinating the various systems. The focus is now on bringing together all the activities for converting and expanding the grid infrastructure (electricity, gas, heat). In addition, innovative storage technologies are being developed. In addition, the state

strives to ensure that load operation is made more flexible at conventional power plants. The key keywords here are: Grid technologies, grid expansion concepts, power-to-gas technologies, smart grid, smart energy technologies, load management, location issues for storage systems. However, the goal is not just to integrate renewable energies into the grid. Rather, it is about a complex system transformation. Nor is it enough for CO_2 intensity to decline only in energy consumption. Rather, it must decrease over the long term in the entire energy supply system. There are already numerous examples and projects in Brandenburg that put key aspects of the system integration of renewable energies and energy storage into practice. They all contribute to improving load management, relieving the grids and stabilizing the energy system.

→ **Sustainability assessment**

→ **Measures for acceptance and participation**

Brandenburg was the first federal state to integrate the topics of acceptance and participation into the goals of its energy strategy. This means that Brandenburg is pursuing regional and municipal participation as an overarching energy policy goal. This is because the implementation of the Energy Strategy 2030 is essentially based on

regional level. With the five regionally developed energy concepts, Brandenburg is the first federal country, which has succeeded in comprehensively assessing the energy situation, the status of the expansion of renewable energies as well as the still possible expansion potentials for the individual regions separately. This now makes it possible to set energy policy priorities across the board. Based on this, concrete measures can be defined to implement the Energy Strategy 2030 in the regions.

Field of action 11: Adaptation to the consequences of the

Climate Change (Climate Change)

Today, climate change is primarily understood as the human-induced share of climate change, although there are also natural factors - i.e. those that are not influenced by humans.

climate changes. The energy turnaround is also a necessary step toward adapting to climate change. The more effective climate protection is today, the more likely it is that we will be able to adapt to the consequences of climate change. When it comes to climate change, the time horizons are diverse. The

means: changes are made to very different The time of occurrence is distributed over the coming decades and centuries. Concrete vulnerabilities, the associated time horizons, and the resulting necessary adaptation measures

must therefore be determined on a problem-specific basis. The region Berlin-Brandenburg is characterized by an abundance of water and low precipitation. The topics of water conservation, water quality, water management as well as rising temperatures and hot spells are - according to current knowledge - the focus of the necessary adaptation work. Risk assessments can help to make private fields of action and regional impacts visible.

Targets

The goal of the adjustment is to enable all affected parties, to the extent possible, to make timely assess the respective change/threat, realis- to identify, select, and take action.

More leeway for local authorities and regions

Local authorities have to make numerous on-site decisions to adapt to climate change. The federal and state governments are therefore pursuing the goal of successively amending the relevant regulations in such a way that decision-makers can make the necessary decisions.

and are legally secured for this purpose. The strategic implementation of measures to adapt to the consequences of climate change continues to require interlocking cooperation between regional planning and the municipalities. The new conditions created by climate change must therefore be integrated into enforcement tasks. Standards and procedures that hinder or impede measures for adaptation to climate change must be reviewed to determine whether they should be maintained or dispensed with on the basis of technical necessity.

The state continues to concentrate on its necessary tasks, especially those that individuals cannot organize. One example of this is flood protection.

In order to effectively manage adaptation at the various levels of action, it is necessary to expand information and communication structures.

Goal and conflicts of interest

Of course, conflicts of interest and objectives also arise in adaptation to climate change, for example in land use. Such conflicts, as they

The problems that have already become apparent, for example in connection with urban densification, which impedes the ventilation of cities, still need to be worked out. In this context, it may also be necessary to take into account the different temporal

ate that may reduce conflicts, and

can. Based on this, it is necessary to develop strategies to con-

conflict solution and to develop the adaptation initiatives. of individual policy areas (e.g. flood protection and low-water management).

Formulation of goals

In the creation and implementation of the strategy, the

it is necessary to quantify targets. At the same time

To schedule stage goals. In this way it will

It is also possible to monitor the individual measures and adjust them if necessary. In turn, needs-based indicators help to determine when it is necessary to make decisions. They thus increase the certainty of decisions and improve the ability to act. The need for action can arise, for example, from

→ unexpected changes in climate parameters,
about number of heat days

→ the consequences of changes in climate parameters,
for example flood, low water, star- cre rain, drought

→ the indirect consequences; for example, crop failures floods, illnesses, disruptions to the transportation system, storm damage

→ the extent of future climate change and
However, there is the following problem: measures that have been introduced and taken can hardly be measured with indicators.
as they will take place in the future and are therefore not
are measurable.

Preventive action should take precedence over remedial action.

Measures*

It is necessary to develop department-specific management concepts based on the German Strategy for Adaptation to Climate Change (**DAS**). Based on this, it should be examined whether it is necessary to draw up a coordinated state concept in order to reduce possible conflicts of objectives and, if necessary, to develop solution concepts.
to be developed. **The task of "adapting to the consequences of climate change" must be integrated into the specialized policies of the departments.**

For example, the following tasks are to be performed:

→ **Ensuring cooperation** among the federal states, with the federal government and the European Union.
schen Union

→ **Further development of the Joint Spatial Planning Concept for Energy and Climate (GRK)** as an infor-.
melle planning for the Berlin-Brandenburg capital region

→ **Establishment of a concept that reduces the fragmentation of spaces and the sealing of areas can be reduced,** as well as the combination with the concept for migration corridors for wildlife species between the protected areas and the green bridge program

→ **Orientation of nature conservation strategies towards the stabilization of ecosystems** with relevance for climate protection and **the preservation of the functional capacity of landscapes on** the basis of a regional risk assessment for Brandenburg

→ **Continuation and concretization of the water balance management** with the aim of fulfilling the Requirements of the EU Water Framework Directive

→ **Expansion of the groundwater monitoring network and development of a water information network** with the inclusion of
The development of the local community's interests and regional specifics

→ **Continuation of the forest conversion program** with the aim of increasing the proportion of site-appropriate, near-natural and
increase structured mixed forests.

→ **Further development of the heat warning system** beyond inpatient care and adaptation of existing **heat warning systems.**
information structures

→ **Review department-specific concepts and programs,** such as the avenue concept and the
Peatland protection program: These are to be reviewed with regard to increased adaptability and continued accordingly.

→ Monitoring of **KfW funding for energy-efficient neighborhood concepts** by the state government.

→ **Preparation of an urban redevelopment - caused by climate change;** support of a climate-change-oriented construction

→ **Review of sectoral policy legislation to determine** whether it meets the requirements of adaptation to the climate change. This is done in a coordinated manner via an interministerial working group.

→ Reviewing and, if necessary, adapting **the planning instruments of regional planning to consider challenges posed by climate change**

→ **Indicators:** It should be examined whether the federal indicator system currently being developed can be used for state-specific indicators.
requires some additions. The same applies to the existing systems of the scientific institutions as well as the responsible Brandenburg authorities, if necessary also those of the bordering states. If necessary, supplements are to be made - taking into account factual and political concerns.

→ **Science:** Further research is needed to adapt to climate change. The results from the Innovation Network Climate Adaptation Brandenburg Berlin (INKA BB) as well as from the model projects of regional planning (MORO) are to be prepared. In addition, it must be examined to what extent they can be used strategically. In particular, the effects of the individual measures must be examined. If necessary, the catalog of measures must be revised. If necessary, new regional scenarios and impact assessments must be prepared.

→ **Cross-border cooperation:** Increased cross-border cooperation is required.
tions. This applies in particular to flood protection. This is the only way to better avert hazards that are foreseeable in the long term and to make better use of synergy effects.

→ **Involving the public:** The entire adaptation process can only succeed if the public is involved in the process.

Further documents on the focus of action
'Model region for energy transition and climate adaptation'.

Brandenburg Energy State
http://www.energie.brandenburg.de/sixcms/detail.php?template=energieland

Brandenburg Future Agency
http://www.zab-energie.de/de

Renewable Energies
http://www.mugv.brandenburg.de/cms/detail.php/bb1.c.295361.de

Brandenburg Energy Technology Initiative
http://www.eti-brandenburg.de/

Climate protection
http://www.mugv.brandenburg.de/cms/detail.php/bb1.c.289616.de
http://www.lugv.brandenburg.de/cms/detail.php/bb1.c.296626.de

Climate Change Research Platform http://www.klimaplattform.de/

Information on energy efficiency
http://www.stromeffizienz.de/

Innovation Network Climate Adaptation Brandenburg Berlin (INKA BB)
http://www.inka-bb.de/

7. Sustainable Financial policy

7.1. Initial situation

A fundamental goal of sustainability policy is to ensure that future generations have opportunities for development.

to preserve. Therefore, it is only justifiable to finan-
The aim is to postpone financial burdens - by accumulating debts - if later generations also benefit from them. For example: a functioning infrastructure, a good education. However, while the benefits that will be passed on to the following genera-

often only inaccurately quantifiable.
the debts that the state of Brandenburg has accumulated over the last 20 years can be precisely quantified. At the end of the 2013 budget year, it stands at around 18.4 billion euros, or 7,506 euros per inhabitant.

Debt brake

The debt brake enshrined in the German constitution stipulates that, from 2020 at the latest, budgets must be structurally balanced in terms of revenue and expenditure without borrowing. This means that from this point on, the federal states are effectively prohibited from taking on new debt each year. In view of the general indebtedness of the public budgets and in the interest of the

This requirement is important in the context of intergenerational justice.

comprehensible. However, it limits the financial
s financial leeway in the state of Brandenburg. This is because new debt is no longer available as a possible source of financing. In addition, the state budget will be burdened by the gradual expiry of the Solidarity Pact II by 2019.

Financial Markets

Since the national and international financial markets also have a direct impact on the lives of the people of Brandenburg, it is necessary for the state to support regulatory measures.

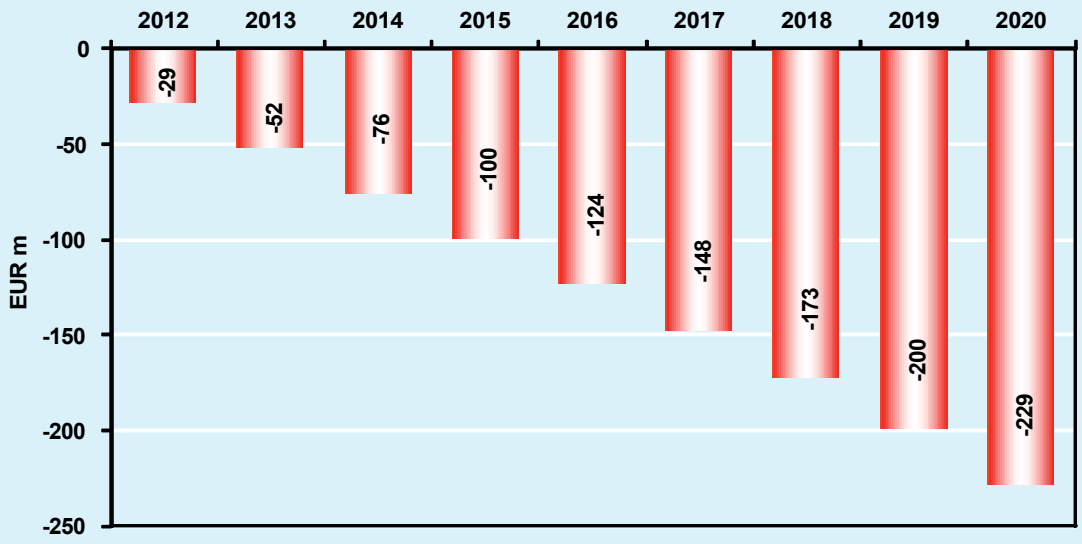
Demographic change

In addition, demographic change is having an impact on

the
- The state and municipal finances are also being negatively impacted by the projected further population decline, the change in population structure and the uneven population development in the various parts of the country. This is because both the tax revenues and the payments

in the federal state fiscal equalization system depend on the residential population.
population.

Fig. 20 Demographic-induced shortfall in revenue in the Länder fiscal



Source: Financial Plan 2012-2016 of the State of Brandenburg (population forecast by the Berlin-Brandenburg Statistics Office, calculations by the

Decrease in revenue

Overall, it can be assumed that the total of all revenues available to the state of Brandenburg to fulfill its tasks from 2019 onwards will probably fall compared with today, despite the current favorable tax revenue trend. Further risks arise from the distortions on the international financial markets.

Areas of tension

From the perspective of sustainable fiscal policy, tensions with other policy areas always arise when additional financial resources need to be made available in order to carry out new tasks, expand or restructure them, or even simply to maintain of their political scope for action.
The same applies if it is "only" a matter of providing the funds unchanged at the previous level.

Synergies

In contrast, synergies between sustainable finance and technical policy are always apparent when a critical review of the tasks leads to a discontinuation or reduction of the intensity in the performance of tasks and leads to a higher efficiency.
The same happens when the reduction of unsustainable subsidies reduces the burden on the state budget. The same happens when the state budget is relieved of unsustainable subsidies. On the other hand, sustainable investments and support measures can increase value creation in the state and thus strengthen the revenue side in the long term. As a cross-sectional task, strategic elements of a sustainable financial policy are therefore always directed at the entire state government, as well as at municipal and civil society actors.

Sustainable elements

In recent years, ecological and social elements have found their way into numerous areas of fiscal policy. This applies to both the federal level and the state of Brandenburg. Examples of this are the greenhouse gas trading system, the ecological tax reform, the introduction of environment-related finan-

Fig. 21 Forecast of income development of the state budget until 2020

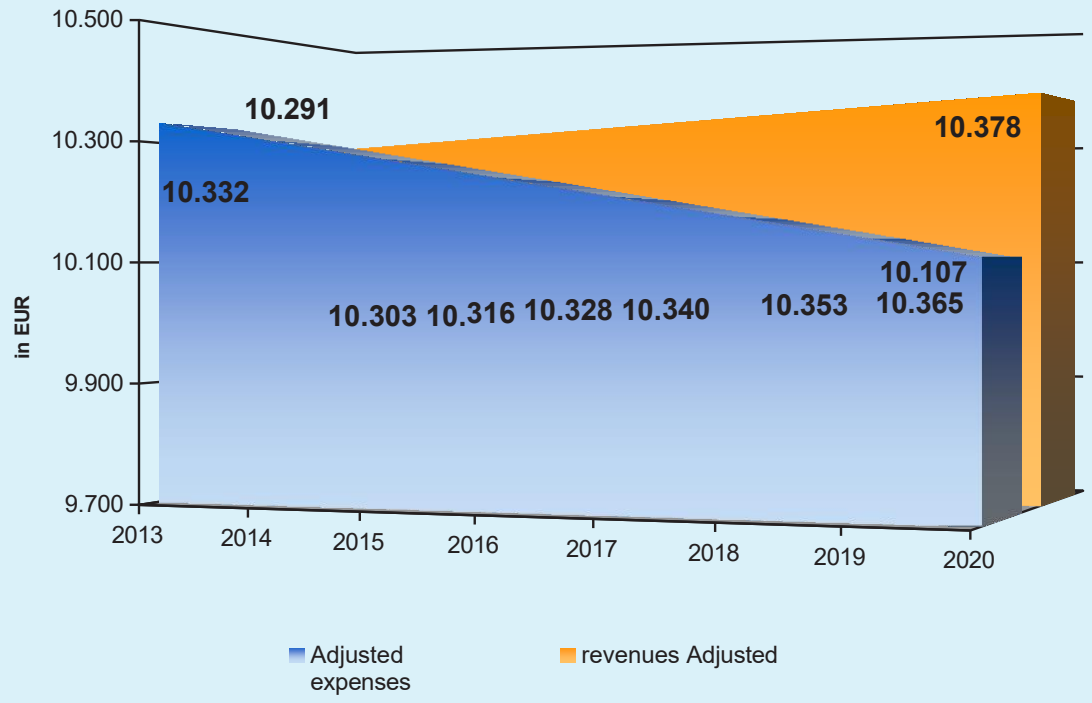
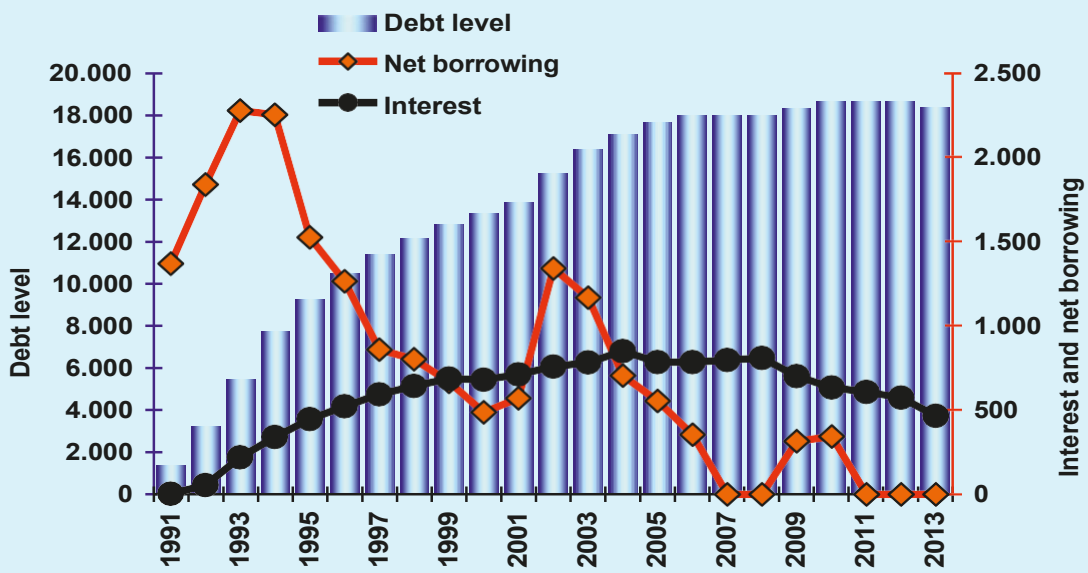


Fig. 22 Development of debt (left-hand scale), netborrowing and interest rates (right scale) since 1991



Source: Ministry of Finance State of Brandenburg

instruments in the transport sector and the inclusion of sustainability criteria in EU structural funding. The experience gained can be used to further develop these approaches in the sense of a comprehensive socio-ecological orientation of the financial system and to supplement them with other suitable elements.

7.2. Need for action

The initial situation described above indicates that the state government needs to take action in three areas in particular if it is to fulfill its governmental responsibilities and live up to its role as a role model and initiator:

→ Financial policy
→ Budgetary policy/administrative management
→ Funding policy

In these areas, the state government can act effectively, for example, through its own administrative actions or by shaping state law accordingly. It can also work to change the framework provided by federal and EU law. A further means of shaping the state is - as an ongoing task - the effective and future-oriented use of pre-available resources. This, in turn, can be controlled and monitored by the state government using suitable accompanying instruments. However, it will not only have to pay attention to limiting expenditures, but also to tapping opportunities to increase revenues in order to be able to shape future developments.

Ultimately, the state is also responsible for structuring the municipal fiscal equalization system. This is because it supports the municipalities - within the framework of fiscal equalization - in managing their tasks.

A large - and in the course of the demographic development still increasing - part of these tasks is likely to initially result in higher costs (cost immanence). It is therefore in the interest of the state and the municipalities to secure the share of financing for municipal services of general interest to which the municipalities are entitled. In particular, the cyclical fluctuation of the tax revenue accruing to the municipalities should therefore be reduced. Accordingly, the state government will use its influence at the federal level to bring about the necessary legislative changes. In addition, it should be aimed that the federal government, after taking over the

The Federal Ministry of Finance is responsible for the complete assumption of expenditures for basic benefits for old age and reduced earning capacity (SGB XII) at the municipal level.

7.3. Guideline "Sustainable Financial Policy"

A sustainable financial policy can and should make a significant contribution to anchoring the principle of sustainability in all areas of the economy and society. In this context, market-based and market-compliant instruments are particularly important. This is because they can influence the behavior of actors.

Efficient management of stakeholders and incentives for sustainable
behavior. A sustainable fiscal policy is characterized by the fact that it shapes and secures the state's revenues and expenditures in a forward-looking manner, which includes the criterion of intergenerational equity.

Financial Policy

The interactions between environmental, economic and social issues are manifold. Thus

influences the distribution of burdens (taxes, levies),
The behavior of market participants is influenced by the benefits (e.g. from common goods), risks, income and wealth. At the same time, it affects the use of natural resources and social conditions. Distribution thus has an important political control function in the sense of sustainability. In addition, fiscal policy is always oriented to the overall economic and social situation.

The main reason for this is the need for a common sense of justice.

Capacity to act

The ability to act in terms of financial policy is the basis of any policy aimed at sustainability. By-

The purpose of sustainability is to ensure that the financial
to secure these spaces in the long term. Only in this way can policy be shaped. Budget consolidation and debt reduction are therefore just as important as the sustainable use of funds.

Sustainability

"Sustainable" fiscal and budgetary policy requires a long-term perspective. This means:

→ Increase and stabilization of revenues, in particular through the following: reliable in

from taxes and levies, taxation of all types of income, reduction of subsidies with an unsustainable effect, reduction of unsustainable

tax privileges, the obligation to pay taxes and the Internalization and compensation in the use of common goods

→ Budget consolidation and debt reduction at

simultaneous creation of financial

Scope for counteracting the negative environmental and social effects of the market economy.

→ Preservation of the substance and value of communi

and national assets

Integrated approach

In order to make this guiding principle more effective in practice, it is necessary to take an integrated approach. This means that the interactions described above must be taken into account, an overall economic assessment must be carried out and life-cycle analyses must be used as a basis in order to complement a cameralistic budget policy.

Fields of action

For the state of Brandenburg, the following key areas of action for future fiscal policy emerge:

→ Financial policy in the sense of a targeted shap-

It is used to manage the revenues and expenditures of the state budget. Its primary purpose is to secure revenues by ensuring that tax and levy policy

is carried out appropriately and the financial risks be limited. The federal structure, however, limits the state's own regulatory competence with regard to taxes and levies. Together with other federal states, however, Brandenburg can work in the Bundesrat to successfully take appropriate steps.

→ Budgetary policy/administrative management and

Funding policy: Here, the state government can direct its actions directly by targeting its regulatory and funding policy more specifically, setting binding standards for procurement, supporting research priorities, adapting business funding, and providing greater support for local and non-governmental sustainability initiatives.

7.4. H anding fields

Field of action 12: Financial policy Goals

Due to the distribution of competences between the state, the federal government and the European Union, Brandenburg has only limited competence in many areas of fiscal policy. Against this backdrop, the state government will - as in the past - seek cooperation with other federal states in order to gradually move toward this goal in the Bundesrat.

The aim is to improve the financial and fiscal framework.

The company's strategy is to adapt its business activities to the requirements of sustainability. In doing so, it primarily pursues the following goals:

Financial markets and the real economy

The financial crisis has led to a loss of capital and assets. However, these funds would be needed to invest in the real economy, also so that it can align itself more closely with sustainability requirements. The capriciousness of the financial markets has triggered considerable social upheaval throughout Europe. This development must be prevented in the future. This requires stable and predictable financial markets and financial institutions that can reliably fulfill their functions for companies in the real economy. On the other hand, a sustainable financial policy contributes to stabilizing the financial markets.

Private commitment to financing sustainable investments

Public funds alone cannot provide the necessary

Transformation to sustainability cannot be financed. Otherwise, the debt of local authorities would rise to unconstitutional, unsustainable dimensions. A suitable incentive and regulatory framework, on the other hand, can direct private capital in such a way that it triggers investment thrusts in the sense of sustainability. The same applies to the personal commitment of individuals. One area of application for this is, for example, local energy production.

Strengthening the protection of the commons

Climate change and the progressive loss of species diversity are examples that show that the protection of the natural commons - in relation to private claims for use - has a higher priority. needed. The state government therefore supports measures to strengthen the protection of common property within the framework of market-based competition.

Social-ecological fiscal policy

The existing concept of the eco-tax is understood as an element of social-ecological financial reform. The revenue generated from this tax can be used again, as determined by the budget legislator, for policy areas that promote sustainability, e.g. as a "climate bonus" in the form of subsidies.

to improve energy efficiency and to increase the Financing the necessary technology change.

Conflicting goals

On the specific conditions of companies and industries, especially those that are in international competition, must be taken into account. The measures should give all economic actors (e.g. companies, customers, trades, associations, etc.) sufficient room for the necessary adjustments.

Measures* **Stabilize financial markets**

→ **Supporting the safeguarding of pension systems** by examining a strengthening of the pay-as-you-go system. Compared to the funded pension insurance system and the inclusion of all types of income in the social security system.

→ **Implementation of the resolutions on the introduction of a financial transaction tax.**

→ **Support all efforts for effective financial supervision:**

- Supervision and regulation of financial markets to reduce risks to public budgets, which may result, for example, from necessary support measures
- Extension of the existing banking and stock exchange supervision to all actors and produc-. te of the financial markets, such as "off-balance sheet" transactions
- Working to adjust the regulations as well as the practice of lending by nongovernmental Banks and financial institutions

Private commitment to financing sustainable investments

→ Improvement of the framework conditions for citizen- and cooperative-financed investment projects. (citizens' funds, cooperatives)

→ Promoting the willingness of private assets to participate in the realization of projects for the Sustainable development

Common good protection and social-ecological financial reform
Support

→ **approaches to protect natural resources on the basis of private law (e.g. competition law)**. **Strengthening** by anchoring internalization and compensation obligations

→ of **steps to further develop the eco-tax concept** towards a social-ecological financial re- form

→ of **financial policy measures to maintain the functionality of the natural capital** and Reward appropriate services of land users

→ **the further development of the EU emissions trading system with the aim of making it an effective market-economy instrument for climate protection**

→ the voluntary preparation of **public interest balance sheets** by public and private companies.

Examine the financing of **biodiversity measures** with the help of EU funds.

Field of action 13: Budget policy and administrative management

Targets

In contrast to the goals mentioned in the previous field of action, the state has greater scope for action here.

Effective and efficient management of the process required for a sustainable development, the transformation process required

The transformation of society as a whole that is required for sustainable development needs an administration capable of action. It has a regulatory, planning and design role, but also a role model and a role model.

Incentive function. Due to the demographic changes However, the general conditions under which the administration has to fulfill its tasks are changing due to the increasing complexity of tasks and the changing expectations of public services. As a result, the tasks of the administration will change in certain areas - in some cases increasing, in others decreasing. So that they can meet the coming

social challenges,

it needs sustainable effective and efficient structures. To this end, a continuous and critical review of the tasks as defined in the State Organization Act is required.

Local self-government plays a special role in ensuring the state's ability to act. Most public tasks are performed at the municipal level, where political decision-makers and the administration are in direct contact with citizens. Only when local actors are involved in regionally important decisions, using local knowledge, can the highest degree of transparency and democratic legitimacy be guaranteed in the execution of tasks. Local self-government also means that citizens are involved in voluntary work.

and hold public office. Both

Municipal self-government, as well as the role of municipal volunteerism and non-profit civic engagement, will be strengthened if those tasks that can best be performed locally are also, as far as possible, the responsibility of the municipality.

But new forms of networking and communication will also be necessary at the level of the state administration to enable future-proof administrative structures. This applies, for example, to the handling of interdepartmental enforcement and service tasks, the use of electronic communication technologies and e-government systems, and the increased use of mobile citizen services. Against the backdrop of the planned further reduction in the number of positions and jobs, the importance of measures for personnel development and qualification is also growing.

fication.

Balanced state and local budgets Limiting debt in public budgets is, on the one hand, a constitutional requirement. On the other hand, this is also a mandatory prerequisite for intergenerational equity, which in turn is an essential component of the sustainability approach. However, the necessary measures should not

The aim is not just to limit spending. It is much more important to maintain the local authorities' ability to act and to tap potential for increasing revenue. At the same time, it is essential to preserve the substance and value of local assets.

Exemplary management

The state and local governments play a significant role in the economy. This is done through construction activities, real estate management, capital investments, mobility and procurement. Exemplary administrative behavior also sets standards for other players. If it directs its demand toward sustainable, future-proof products and services, this in turn helps to expand the range of products and services on offer. In this way, the administration becomes a driver for sustainable development. An example of this is procurement

low-emission vehicles. In order to avoid possible conflicting

In order to dissolve or reduce the costs of a project, it can help to consider the entire life cycle and the total costs, and to include the external effects. This broader perspective makes it easier or even possible to make the optimal decision that is in the overall interest of the country.

Measures*

Effective and efficient management of the transformation process

→ **Securing the quality and future viability of the public service** in Brandenburg in view of the demographic challenges (decline in the population, retirement of employees from the state administration) by means of an appropriate personnel policy.

→ **Ensuring future-proof, effective and efficient administrative structures** taking into account Consideration of the strengthening of municipal self-government, municipal volunteerism and civic engagement, as well as the examination of the future duty bearer, the use of information technology and the examination of service-internal task bundling.

→ **Recruitment and targeted hiring of qualified personnel** and promotion of post-graduates.
At the same time as continuing to make the necessary job adjustments, the state will continue to pursue the precautionary measures it has been taking since 2010 to recruit personnel and new recruits. The state government advocates an analogous policy at the municipal level

→ The state government is committed to increasing the proportion of women and the general diversity quota in public administrations, as these are essential instruments for attracting skilled personnel

Balanced state and local budgets

→ **Mitigation** of **budgetary risks** through KPI-based planning and budget management.

→ **Recording and consideration of the long-term sustainability and follow-up costs of** governmental Investments

→ **Support steps to reduce unsustainable subsidies** and exemptions.
facts

→ **Increase and stabilization of revenues,** for example through an appropriate tax and duty burden.

→ **Cost savings through the use of synergy effects,** for example through cooperations or mergers.
cultural and educational institutions

→ The state government will use its influence at the federal level to make the necessary legislative changes.
use the opportunities to **reduce the cyclical fluctuations in the tax revenue accruing to the municipalities**

Exemplary management

→ **Working towards the consideration of sustainability-related aspects in procurement** in Land- and companies that are subject to the control of the state (shareholdings)

Field of action 14: Funding policy

Funding policy is a central means of implementing political strategies and concepts. Funding is currently available to the state of Brandenburg from the following sources, among others: EU Structural Funds, European Agricultural Fund for Rural Development (EAFRD), federal funds for community tasks and state funds. The allocation of EU and federal funds is linked to content-related and formal requirements. In the case of the EU funds, these also include sustainability-related requirements. Here, Brandenburg has above all the possibility to

The company has a number of options for shaping the content of the program. However, it can also play an active role in shaping the framework conditions. In preparation for the 2014-2020 EU funding period, the state government faces the task of reconciling declining EU funding and tighter EU requirements with state policy goals, including budget consolidation. To this end, it has defined the following three priorities, which apply to all funds: Inno- vation, Education and Skilled Worker Retention, Careful

and efficient use of resources/renewable energies.

Targets

Initiating sustainable development processes through subsidies

Subsidies can support and accelerate sustainable development. As a matter of principle, their use should concentrate on those projects that have the highest priority in terms of sustainability.

Enabling benefits. Conflicting goals can arise, if projects geared to sustainability initially generate fewer jobs and less tax revenue, and at the same time compete with projects that promise greater benefits in the short term but do not contribute to transformation. Supporting innovation-friendly small and micro enterprises is particularly useful where they are drivers of innovation ("pioneers of change"). The funding instruments made available by the EU for innovative projects should be used specifically for this purpose.

Achieve self-sustaining investments through funding

The production costs of innovations can initially be so high that they are not competitive. However, the example of wind energy has shown that targeted technology support can effectively promote market introduction and open up new future markets.

Make greater use of alternative funding instruments

In view of declining EU funding and the need for a more

In order to accelerate the transformation process, alternative funding instruments should be used. These include revolving funds (i.e., funds that are reallocated after repayment), open/silent partnerships or the use of joint venture capital. These can be used to increase the leverage effect of scarce funds.

Measures*

Initiating sustainable development processes through subsidies

→ **Systematic anchoring of sustainability as a cross-divisional principle** in all pha-
The programming and implementation of the European Structural and Investment Funds (ESI Funds).

→ **Selection of projects:** Examination of the extent to which, through supplementation, concretization or expansion, existing-.
the aspect of sustainable development can be taken into account even better in the project selection criteria.

→ **Tying housing and building subsidies to high energy standards.**

→ **Incentives for innovative and sustainable solutions:** resource-saving processes, conversion, and energy, sustainable use of agricultural land, bioeconomy, sustainable mobility

→ **Utilization of regional research and development resources and networking of these with the regional practice**

→ **Regional value creation as well as strengthening and networking of local actors under-support**

Achieve self-sustaining investments through funding

→ Project selection as well as approval of funding: Greater consideration of long-term viability and the follow-up costs

Accelerating the transformation process through the leverage of alternative funding instruments

→ **Greater use of alternative funding instruments**

→ **Greater use of loans** in areas where, up to now, mainly grants have been awarded

→ **Greater use of the guarantee instrument.**

Further documents on the 'Sustainable fiscal policy' action area

Information from the Ministry of Finance
http://www.mdf.brandenburg.de/cms/detail.php/lbm1.c.224141.de

Budgetary and financial policy
http://www.mdf.brandenburg.de/cms/detail.php/lbm1.c.354354.de

8. Education and Sustainable Development

8.1. Initial situation

The essential prerequisites for sustainable development in Brandenburg are to communicate the guiding principle of sustainable development, to create and consolidate an awareness of sustainability among the population, and to align the education system and its content accordingly. Education for sustainable development is therefore of central importance.

importance for this process to succeed. It takes place in
all areas of education take place.

"Sustainable education" and
"Education for Sustainable Development

It is essential for the discussion on education and learning in the context of sustainable development to distinguish between "sustainable education" (NL) and "education for sustainable development" (ESD). The state has a dual role in the education system:

→ On the one hand, it must guarantee everyone the right to life-sustaining

long ensure education that supports people in their various stages of life. In doing so, it must ensure equality of opportunity, d.

h. social, gender-specific and individual disadvantages as well as inequalities due to the

compensate for specific subsidies. At the same time

it must promote social participation. All this can be summarized under the term "sustainable education" (NB).

→ On the other hand, it is necessary to improve the content of education.

The aim of the project is to design the educational programs in such a way that they support people in acquiring design and action skills for sustainable development and thus enable a change in values. This concern is met through the holistic and

interdisciplinary educational concept of "Education for Sustainable Development" (ESD).

Both together - sustainable education and education for sustainable development - stand for a sustainable education system.

Education for Sustainable Development in Brandenburg

Education for Sustainable Development is embedded in a process involving society as a whole. Central aspects are:

→ The World Conference on Environment and Development 1992 in Rio de Janeiro and the subsequent Agenda 21 processes.

→ The World Decade of Education for Sustainable Develop- In Germany, this was done by the German Commission for UNESCO.

→ The repeatedly updated National Acti onsplan (NAP) for the World Decade for Germany; the main objective of the NAP is to permanently anchor Education for Sustainable Development in all areas of education in Germany.

→ The United Nations Millennium Declaration of 2000 and the Paris Declaration on Aid Effectiveness of 2005.

→ Resolution of the German Bundestag of 26. April 2012: This calls on the German government to support the follow-up activities to the UN deca- sion.

→ The State Action Plan on Education for Sustainable Development development, which describes goals and measures.

Projects

Within the framework of the UN Decade, Brandenburg has implemented numerous projects and measures on education for sustainable development, including on topics of global learning. Important elements of this process are the establishment of the Round Table on ESD and the Round Table on Development Policy. Milestones include the State Action Plan on ESD of May 2011, the update of which was completed at the end of 2013, and the "Development Policy Guidelines" adopted by the state government in May 2012. In accordance with the key points for the LNHS, the update of the LAP ESD was carried out in a transparent drafting process by an accompanying committee in which representatives of all important stakeholders including the state government (MUGV, MBJS, MWE) and other parts of the administration took part (so-called "Steering Group ESD"). The interim results were presented and discussed at the 2nd Round Table on ESD, which was thus able to provide further impetus for the update.

Cross-sectional task

Education for sustainable development is to be seen as an interdisciplinary task. It is closely related to all action areas of the sustainability strategy, in particular to the topics of "Economy and Work" and "Liveable Villages and Cities". Furthermore, it plays an important role in the implementation of the strategy.

8.2. Need for action

There is a growing need for more comprehensive, and in particular more action-oriented competencies - not least because of the dynamics and contradictions of social, ecological and economic development. These new requirements demand an educational system with forms and contents of learning in day-care centers, schools and in extracurricular areas that can overcome the age-based and institutional fragmentation in

parts separated from each other are reflected and, if necessary, up-

lifts. The aim should be for institutions and services of formal and informal education to cooperate with each other. Sustainable development, in turn, is has become a global existential issue and is therefore also a central topic of education. The aim is to enable all people to take responsibility and to help shape sustainable processes. To do this, however, they must be enabled to acquire a corresponding understanding and to align their own actions - behavior and lifestyle - accordingly.

Demographic development

Demographic change also poses a challenge to the

educational

The new school system will pose special challenges in the future. It will - between 2020 and 2030 - have a significant impact on the school network and school supply, just as it did in the 1990s. According to the current population forecast, the annual birth rate in Brandenburg will halve to about 9,900 between 2010 and 2020. As a result, there will be successively fewer children, initially in early childhood education and subsequently also in schools. Rural regions are already affected by this in the second half of this decade. Initially, the decline will fundamentally call into question the school and regional organization of elementary schools. With a time lag - from 2023/2024 - the decline in the number of students will also be felt in lower-secondary and upper-secondary schools.

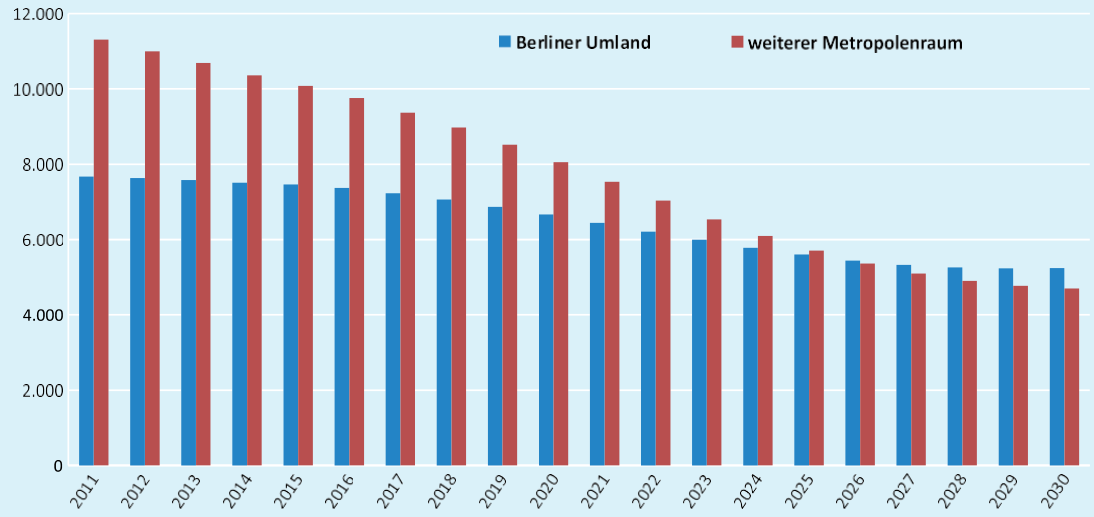
II will be noticeable. It will be decided

The key question is how to organize schooling in view of this development. This also includes securing a decentralized network of vocational schools.

Brandenburg's higher education system is largely unaffected by this development. Thanks to an increased propensity to study among school-leavers in Brandenburg and the attractiveness of Brandenburg's universities for university entrants from other federal states and abroad, capacity utilization is expected to remain stable in the years up to 2025. Against this backdrop, universities are important anchor points that open up individual development opportunities with their educational offerings and thus counteract emigration and encourage inward migration.

of highly qualified employees.

Fig. 23 Birth Trends in Brandenburg 2011 - 2030 - Berlin Surroundings and Other Metropolitan Areas



Source: Berlin-Brandenburg Statistics Office, State Office for Construction and Transport 05/2012

Inclusion

Inclusion is another major challenge. It is not only a task for schools, but for society as a whole. The long-term reconstruction of the school landscape with many inclusive schools points the way to educational institutions in which students learn together and are supported according to their respective learning levels, regardless of their individually different learning requirements. The UN Convention on the Rights of Persons with Disabilities, which the Federal Republic of Germany has signed, is the guideline for action.

ratified in 2009. It represents an important step towards

The aim of the program is to strengthen the rights of people with disabilities.

Material infrastructure

The challenges described here will probably not be limited to a need for conceptual, organizational and institutional action in the education sector. Rather, they will probably also be associated with changed or new demands on the educational infrastructure (e.g., investments in construction and/or equipment due to changes in the number of students and/or special pedagogical needs).

gical requirements, further expansion of all-day programs).

8.3. Guideline "Education and Sustainable Development

The requirements for a sustainable education system move between the two poles of "sustainable education" and "education for sustainable development". A sustainable education system undergoes changes both in its structure and in its educational content.

Right to education

The overarching goal of the right to education is to enable everyone to receive the most comprehensive education possible. This applies to their entire life course. This is a challenge for politics and administration as well as for all educational institutions (daycare centers, schools, universities). All actors - including municipalities, companies, associations, etc. - must contribute to this.

Process of social change

Education for Sustainable Development promotes a process of social change. To this end, it holistically involves the senses, the emotions and the

The ability to empathize with people. Already in the process itself as well as in its result it promotes the participation of the learners. In this way, it also strengthens democracy as a way of life (participation in decision-making and design processes). Other important elements of such a learning process are dealing with and appreciating diversity, tolerance, striving for justice, enduring uncertainties, recognizing possibilities of shaping and assigning them to the respective actors. The change in social values also includes the protection of our natural resources for future generations.

Future-oriented school development

Education for Sustainable Development is an important building block for future-oriented school development, because it is a concept that provides important impulses for the development of the school system.

mission statement and school profile. It reaches into the ge-

ESD is an integral part of school life and the learning culture, and opens the school to the outside world. ESD promotes problem-oriented learning that integrates new perspectives, is interdisciplinary and creative, and is linked to the lifeworld of the learners. Recognition, conviction of one's own effectiveness and willingness to take responsibility are fundamental dispositions of education for sustainable development Brandenburg can build on existing approaches, which were developed, among other things, within the framework of the UN Decade of Education for Sustainable Development. The task now is to continue and consolidate these approaches. Instead of "only" concentrating on individual projects, the aim must now be to anchor education for sustainable development structurally.

Concept of "educational landscapes

The term "educational landscape" includes different ideas of how learning and educational institutions as well as social, cultural actors and communication venues can be networked. The aim is to offer people of all ages better educational conditions and diverse learning opportunities through increased cooperation. The concept of "educational landscapes" is suitable for meeting the demands of a sustainable education system. For

it builds a bridge between sustainable education and education for sustainable development. It overcomes the fixation on existing educational institutions and age groups of lifelong learning. Such a change of perspective requires the cooperation of school and non-school educational institutions as well as the exchange between them. It takes the conditions "on site" as a starting point and thus does justice to the importance of the reality of people's lives. In addition, it contains a clear reference to action. Its aim is to build up a lively repertoire of actions characterized by the will to shape things. It needs to be examined in detail to what extent and which elements of the concept "educational landscapes" can be made fruitful for sustainability in the respective region. It must also be examined to what extent concerns of sustainable development can be addressed in regional educational landscapes in the future.

Sustainable local educational landscapes are based on networked action and a common understanding of what the particular potentials for sustainable action are in the respective region. In particular, children and young people who discover, design and use places of learning at an early age - beyond institutional boundaries - form local and regional identities and gain their first practical work experience in local companies and institutions. At the same time, they establish social networks at an early age. Their potential, in turn, represents a great social capital.

Connection points

"Sustainable educational landscapes" Brandenburg should develop a concrete model of sustainable educational landscapes that links the concept of the "educational landscape" with the claim of sustainable development. Here, the state can draw on experience from the "Learning Region" initiatives. These initiatives combine ecological (e.g. nature conservation), social (e.g. strengthening the community) and economic aspects (e.g. creating jobs in the region). At the same time, they bring together educational processes that take place inside and outside of state institutions.

take place. Another important connecting factor are the numerous environmental education centers and those initiatives in the National Natural Landscapes (large protected areas) that are committed to linking nature conservation and nature use. In addition, many multigenerational houses, which operate successfully in all counties and cities in Brandenburg, contribute to local and regional educational landscapes. Sustainable educational landscapes can promote the development of innovative strategies and solutions on site. For example, extracurricular learning sites (e.g., environmental centers, school laboratories and companies) can work together with schools, research institutions and universities to promote local interest in science and technology. Institutions of political education, in turn, can support interest in participation and democratization processes as an important key competence. Institutions of cultural education can contribute to the promotion of creativity. Social service providers, adult education centers, youth (education) institutions, churches and sports associations can all help to promote creativity.

one can cooperate and promote social enga- gement regionally.

8.4. Fields of action

Field of action 15: Sustainable education (NL): Ensuring equal opportunities, enabling participation

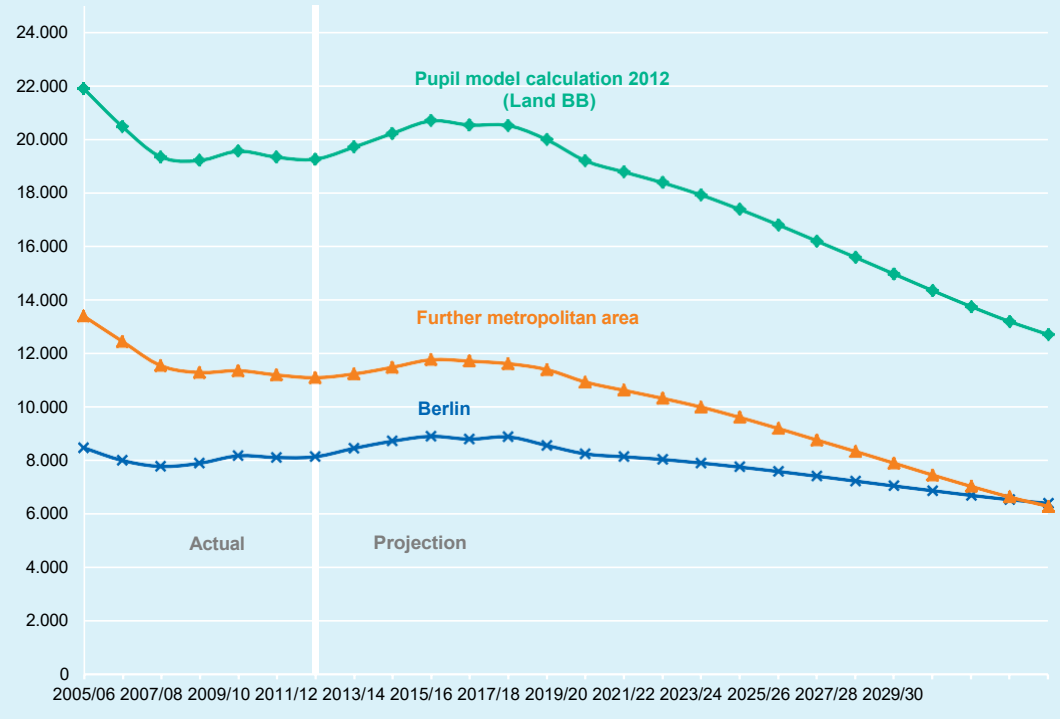
Targets

The right to lifelong education, equal opportunities and equal participation in society are central goals of sustainable education. It requires that the systems of early childhood, school and out-of-school education as well as the training and continuing education systems be safeguarded and adapted to the changed conditions. This also applies in view of the sparse population in the peripheral regions.

regions and with regard to the demographic Change. Despite these challenges, the aim is to achieve a high degree of proximity to the place of residence, permeability of the educational pathways, equality of opportunity and individual support. Because all people in

Brandenburg - irrespective of their financial advantages - should be

Fig. 24 Projection of the number of school enrollments in the state of Brandenburg, Berlin region and other metropolitan areas (public and independent schools)



Source: Berlin-Brandenburg Statistics Office, Ministry of Education, Youth and Sports (MBJS) - model forecast from September 2012.

and economic circumstances - have the ability and opportunity to lead their own lives.

determined, socially and professionally successful.
In this way, sustainable education also serves to reinforce local identities.

Elementary Schools

The upcoming structural and content-related challenges are exemplified in the primary sector. From 2017/2018 onwards, the number of pupils

decline again ("demographic echo"). This will
the demand to guarantee an efficient elementary school system in the peripheral rural regions, which is close to the living space and the place of residence, can only be fulfilled with great effort. The - August 2012

The Demography Commission set up in the fall of
In 2013, the German Federal Ministry of Education and Research (BMBF) presented its final report, which also contains recommendations for action. In this context, the model

"small elementary school" plays an important role. It was developed in the 90s of the 20th century and provides for mixed-age learning groups. The recommenda-

The findings of the Demography Commission also provide important information.
tive suggestions for sustainable education.

Inclusion

The realization of the guiding principle of the inclusive school

also requires significant changes in the school
and everyday teaching. All children and adolescents, with their special talents and limitations, should be supported and encouraged in their individual strengths and characteristics. The conditions for the individual support of students in heterogeneous learning groups must be further developed and may need to be adapted.

Secondary schools and vocational schools

The serious demographic changes described above will also have an impact on the further
leading school system.

Networking

School and training must ensure self-determined, interdisciplinary and interdisciplinary, practical and future-oriented learning, which at the same time takes individual competencies into account. Not-

The necessary knowledge, such as the requirements for scientific work, should be imparted at an early stage. In addition, the networking of schools with non-school institutions and regional and local experts should be systematically promoted. Social places of learning are important, where children, young people and adults can learn to moderate between different perspectives. In accordance with the guiding principle of sustainable educational landscapes, such networking should focus primarily on the topics of economics, social affairs, the environment and politics.

Universities

In addition to the special importance of universities as social innovation engines for solving the most urgent problems (energy; climate impact management, transport, hunger and land use....), their role with regard to issues of social permeability and participation must also be emphasized from a sustainability perspective. This includes the area of internationalization. On the one hand, this refers to the experiences abroad of Brandenburg's students. For example, the proportion of those who complete semesters and/or internships abroad should increase. On the other hand, the number of foreign students at Brandenburg's universities should be kept at a high level, which in turn requires maintaining the attractiveness of the universities for this group of students. In addition, it is important to systematically and cooperatively develop university activities in the area of scientific continuing education (lifelong learning), for example through new offers for permeability between career and studies, in order to contribute to securing the demand for academic specialists.

Digital media

Digital media and Internet-based communication structures will play a more important role in the education system in the future. On the one hand, it is important to take advantage of the opportunities that this offers. For example, digital media open the door to new, additional forms of learning, such as increased interaction and telepresence learning.

The same applies to the organization of learning. For example, timetables, substitutions, learning opportunities and homework can be made available online. On the other hand, however, the risks should not be ignored. These include, for example, the fact that the proportion of direct learning in real social contexts (face-to-face) is reduced. In addition, there are questions of data and youth protection as well as aspects of copyright.

Social skills

In view of the changed living environment of children and adolescents with regard to family development, leisure time activities as well as present and future living conditions, it is desirable in the sense of sustainable education to strengthen the social competences of people of all ages, also with regard to their function as role models. Social learning, whose place is society as a whole, is therefore of great importance. For this reason, the states of Brandenburg and Berlin began revising their framework curricula in the 2011/12 school year. One focus of future plans will be to systematically link subject-specific learning with the development of generic competencies. Accordingly, the teacher training course enables students to work as teachers in a subject-related, interdisciplinary and problem-oriented manner, taking into account social, learning and developmental psychology issues.

Legal regulations

The extent to which it is necessary to change laws in order to implement sustainable education must be examined. This also requires greater coordination among the federal states and between the states and the federal government. On the one hand, the legal regulations must take into account the highly dynamic nature of the education sector. This means that they must allow for flexibility and adjustments in educational content and its organization. On the other hand, they must also guarantee a comparable framework to ensure the recognition of school and university degrees between the federal states and to make it easier to obtain and change a place at university. Overall, the aim is to implement an education system that meets modern, high standards.

and enables young people to successfully meet the expectations of flexibility and mobility.

Indicators

Important reference points for the definition of indicators are provided - for the area of ESD - by the report

"Education in Germany 2012", sponsored by the Standing Conference of the Ministers of Education and Cultural Affairs of the Länder in the Federal Republic of Germany (KMK) and the Federal Ministry of Education and Research (BMBF), as well as the publication of the Federal Statistical Office of Germany.

"Sustainable Development in Germany - Indicatoren Report 2012."

Conflicting goals (examples)

→ Increasing demands on the quality of the educational versus the need to consolidate public-sector budgets.

→ Ensuring a high-quality public service
The increase in the number of schools on offer versus the increase in private education providers (private schools, etc.) and voluntary activities.

→ The requirement to provide learners with more individual
Allowing freedom of movement while at the same time
of the education offered, since financial
Decreasing scope for action (longer routes to school, reduction in support for learning opportunities, etc.)

Measures*

→ **Ensure local elementary school network** through appropriate structural decisions; basis for this is the report of Brandenburg's Demography Commission

→ **Improving infrastructures of inclusive education facilities at selected schools with model investment projects and the energy-efficient refurbishment of buildings as** part of the European Regional Development Fund (**ERDF**)

→ **Expansion of all-day programs**

→ **Stronger participation of students and parents** in schools and at supra- stimulate and support at the lical level

→ **Involving young people in shaping sustainability at the regional level.**

→ **Expanding the scope for self-directed learning** (enabling student-initiated projects, student- ler companies etc.)

→ **Increase in the proportion of practice-oriented educational content and job-oriented internships/excursions** in the classroom

→ Increasing equal opportunities and educational motivation for young people from socially disadvantaged el- The continuation of the state student support program under the Brandenburg Training Assistance Act (BbgAföG).

→ **Intensification of consumer education**

→ **Promoting the internationalization of education,** for example by recruiting teachers, er- educators and social pedagogues with a migration background; strengthening of exchange programs in the daycare, school, youth and university sectors; increased teaching of intercultural skills, improvement of language skills, for example through bilingual teaching.

→ **Continuation of competence-oriented teacher training:** With the new Brandenburg In addition to the consolidation of competence orientation in teacher training under the German Teacher Training Act, the further integration of the content and methods of Education for Sustainable Development in teaching and education is being systematically implemented.

→ **Utilization and strengthening of voluntary commitment** by promoting cooperation between schools. with clubs, associations and the voluntary services

→ **Initiation of model projects to strengthen innovative learning cultures** based on local educ- (practice-oriented, intercultural and intergenerational learning, strengthening of social competencies)

→ **Greater use of multimedia and telecommunication learning offerings and platforms.**

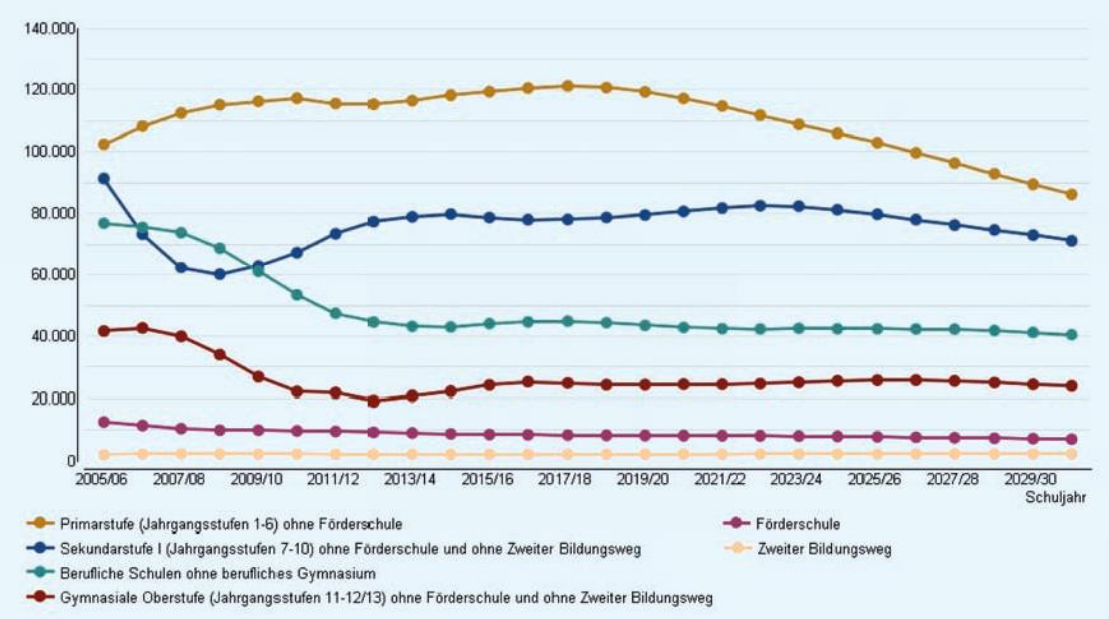
→ **Implementation of the higher education development planning of the state of Brandenburg until 2025;**

focal points are in the process:

→ Maintenance of study place capacities.

- Improvement of horizontal and vertical permeability
- Complementary specialization and sharpening of profiles: e.g.:
  - Expansion of the focus on sustainable management at the University for Sustainable Development Eberswalde (HNEE)
  - Development of new study programs in the health professions at the Brandenburg University of Technology Cottbus-Senftenberg

Fig. 25 **Pupils by school level in the state of Brandenburg (public and independent schools)**



Source: Ministry of Education, Youth and Sports (MBJS) - model calculation from February 2012.

Field of action 16: Education for sustainable devel-
development (ESD): in all areas of education and
tiig
anchor, network educational content and actors

Both in formal and non-formal education

Goals

While sustainable education is oriented towards the preservation of educational equity and participation, aims at the reduction of barriers and disadvantages and thus represents a social framework for all people, education for sustainable development is about content to be learned. Because learning about sustainable development concerns everyone. To achieve this, it is necessary for all actors who can contribute to it to work together in a cooperative and networked manner. It is necessary to anchor ESD systematically and structurally in all areas of education, not just selectively. At the same time, it must become more visible to the public and, in the future, take place more strongly in networks and cooperations from which regional educational landscapes develop.

Dimensions

ESD goes beyond the classic areas of environmental education and global learning. This means that all areas of education must be included.

ESD must be implemented in an appropriate manner.

School, vocational training and higher education (formal education), but also elementary education and adult, child and youth education - regardless of whether they are in the form of environmental, forestry, cultural or political education or in the field of global education.
learning takes place (non-formal education) - their je-

specific contribution to education for sustainable development.

development. In addition, efforts should be made to effectively anchor ESD in all programs and measures of the responsible departments. This also applies to the ERDF and ESF operational programs and the EAFRD rural development plan for the new 2014-2020 funding period. Furthermore, ESD must be integrated with other strategies and action programs of the state that serve to raise awareness among the population. These include, for example, the consumer policy strategy, the implementation of the development policy guidelines, mobility and health education, the biodiversity program of measures and the measures for sustainable consumption. In addition, references to the activities of civic education in the areas of human rights, democracy, and the environment must be made.

to establish peace. This requires greater coordination within the state government on the topic of ESD. Finally, ESD must be developed as a task for society as a whole: ESD must be linked to

as high a quality as possible via qualified actors and stakeholders, as well as educational institutions, and communicated as attractively as possible in the media. The importance of sustainable educational landscapes in this context has already been explained above.

Implementation State Action Plan

The core of ESD in Brandenburg is the further development of the state action plan "Education for Sustainable Development". In accordance with the cornerstones of a strategy for sustainable development in the state of Brandenburg, the update takes stock of the situation and, based on this, develops overarching guidelines and goals for the orientation of ESD. Through the definition of overall goals, sub-goals and measures, a graduated system of goals and measures is available, which connects the strategic and the operative, i.e. the level of action, and in this way enables a long-term orientation of the content of ESD activities in Brandenburg. The update also contains statements on a follow-up process in which the implementation as well as the necessity of an adjustment of guidelines, goals and measures are periodically reviewed. Here, too, the steering group (see explanation under V. 1. "Projects") is to play a leading role.

→ After the completion of the update of the Lan-

After the completion of the ESD Action Plan, the task must now be to implement it. A key aspect of this is the continuation of initiatives to promote ESD beyond the UN Decade of Education for Sustainable Development (2005-2014) in order to achieve future-proof structures for anchoring ESD in all areas of education and to move away from the project status that ESD still has in many areas of education. The state government will support the implementation of the updated state action plan, which is largely supported by civil society actors.

Indicators

The definition of indicators in this area is embedded in an overall process of indicator definition for Brandenburg. The workshop report "Indicators of Education for Sustainable Development" of the German UNESCO Commission and the "Proposal of an Indicator Set for the Assessment of Education for Sustainable Development" of the University of Bern provide important reference points.

Conflicting goals

→ Need for financial and human resources versus narrowing financial margins.

→ Content-related requirements of ESD for teachers while at the same time aiming to expand the learner's freedom of action

→ Cross-curricular and interdisciplinary application

The aim of ESD is to teach the teaching and learning content of the individual subjects within a limited period of time.

Measures*

Embed ESD in all areas of formal and non-formal education, especially through:

→ **Consistent anchoring of ESD** in all framework plans and curricula of the school (elementary school, secondary school, vocational school).

and lower secondary education by 2015) and vocational education and training.

→ **Ensuring ESD competencies** in the school advisory and support system (BUSS) and in the Further training of consultants by the LISUM

→ **Greater consideration of ESD as a cross-cutting issue that affects all disciplines in the be- the field of academic learning, also in the training of teachers.**

→ **Agreeing on common standards of ESD** with a defined quality, including process monitoring and evaluation

→ **Quality development for ESD in the field of extracurricular educational institutions** as a first step. the quality development

→ **Qualification and further training of actors and educational institutions for ESD.**

→ **Supporting schools in developing an ESD-oriented profile.**

→ **Use of the possibilities of teaching ESD** in the programs of the State Academy for Public Education. The state's central office for political education, adult education centers, chambers of industry and commerce, chambers of crafts, and other educational institutions.

→ **Measures and support for a sustainably designed everyday life in all educational institutions.**

(environmental and sustainability management, if possible, with appropriate certification, such as the EMAS environmental management system, new construction and structural renovation of educational facilities in accordance with the principles for sustainable construction).

Develop ESD as a task for society as a whole, in particular by:

→ **Formation of all stakeholders in the field of ESD into regional education landscapes, support of cooperations and networks**

→ **Continuation of the networking of stakeholders in the field of ESD, as currently in the form of the Round Table ESD and the Round Table Development Policy**

→ **Support of an organizational framework for the interconnection of the thematic networks.**

* The decision on the implementation and design of the measures will still have to be made on a case-by-case basis.

Further documents on the focus of action
'Education and sustainable development'

Education in B1randenburg

Information from the Ministry of Education, Youth and Sports
http://www.mbjs.brandenburg.de/sixcms/list.php/mbjs

Internet portal on inclusion
http://www.inklusion-
brandenburg.de/

Education server Berlin Brandenburg
http://bildungsserver.berlin-brandenburg.de/

State Agency for Civic Education
http://www.politische-bildung-brandenburg.de/

State Institute for Schools and Media
http://www.lisum.berlin-brandenburg.de/sixcms/detail.php?template=lisumbb_start_d

Education for Sustainable Development (ESD) in Brandenburg

Information from the Ministry of Environment, Health and Consumer Protection
on Education for Sustainable Development
http://www.mugv.brandenburg.de/cms/detail.php/bb1.c.300757.de

Round Table ESD
http://www.mugv.brandenburg.de/cms/detail.php/bb1.c.310573.de

State Action Plan on Education for Sustainable Development (LAP):
Brandenburg's contribution to the UN Decade of Education for Sustainable Development
http://www.mugv.brandenburg.de/cms/media.php/lbm1.a.3310.de/lap_bne.pdf

State Action Plan on Education for Sustainable Development (LAP):
1st update
http://www.mugv.brandenburg.de/cms/media.php/lbm1.a.3310.de/lap_bne_erste_fortschreibung.pdf

Development policy guidelines
https://sixcms.brandenburg.de/media_fast/3246/Entwicklungspolitische_Leitlinien_BB.pdf

Information from the Ministry of Science, Research and Culture
http://www.mwfk.brandenburg.de/sixcms/detail.php/bb1.c.221589.de

9. Sustainability as a political process

9.1. Participation and Communication

The state government considers the participation of civil society in the establishment and implementation of the sustainability goals to be a central element of a successful sustainability policy. At the same time, there is an interest in ensuring that the goals of the sustainability strategy receive broad societal approval and that the citizens' ability to participate and shape the strategy is strengthened. Voluntary commitment is - also in view of

of the demographic development - an indispensable

This is an essential element of social solidarity and responsibility. Efficient civil society initiatives can promote participation processes.

The following activities support this:

→ Development of a participation concept for the Strategy implementation

→ Creation of a Brandenburg guideline on Participation opportunities

→ Anchoring the understanding of sustainability in educational and training institutions, e.g. adult education centers and civic education institutions

→ Support of participation processes (e.g. Round Table "Education for Sustainable Development", Round Table Development Policy)

→ Continuation of local and regional action groups in connection with the EU funds

→ Self-organization of civil society initiatives

Linking up with existing approaches in the fields of education, regional development, Local Agenda 21, etc. with the aim of closer and cross-thematic networking.

→ Continuation of the "Youth Forum for Sustainable Development".

The sustainability strategy plays a key role in the state government's political communication. The individual sectoral policies are placed in its context. It thus serves not only to anchor sustainable development in the government, but also in the politics, economy and society of the state of Brandenburg as a whole.

Knowledge of existing sustainability projects and examples of good practice can make a significant contribution to anchoring sustainability awareness in society. In the meantime, there are projects throughout Brandenburg that illustrate the added value of the sustainability approach. These need to be made more widely known.

The state government is strengthening information and communication with the following measures, among others, whose implementation and design still have to be decided on a case-by-case basis:

→ Increased use of appropriate communication ways of the state government

→ Improvement of the Internet presence of the Landesregierung

→ Launching of a competition/award for the post-sustainability in companies and civil society

→ Participation in nationwide and statewide as well as regional events

→ Implementation of sustainable aspects at events → Implementation of sustainable aspects at events

9.2. State government as a role model

→ The state government orients its administrative The aim is to ensure that the company's actions and the use of the country's property are in line with the standards of sustainability. In particular, the following activities will be examined:

→ Application of ecological and social criteria in the awarding of construction contracts and in the conclusion of service and supply contracts, including the consideration of fair trade products

→ Step-by-step energy refurbishment of buildings to the basis of a stocktaking

→ Further development of the already existing offer fleet offers in the area of sustainable mobility services (e.g., increased use of public transport, expansion of offers of fuel-efficient and low-emission vehicles, promotion of cycling).

→ Introduction of the EMAS environmental management system and the ISO 50001 energy management system in other state facilities and state companies.

→ Continuation of the activities of the state operation for Real Estate and Construction (BLB) for sustainable real estate management.

→ Expansion of sustainable management of other Land owned by the state; ensuring high management standards in the state forest

→ Development of a concept of measures "CO_2 -neutral state administration"

→ Development of a "sustainability master plan" in the areas of procurement, real estate, buildings, mobility and event management of the state administration

In addition, the state government is striving for the following:

→ Family-friendly work organization and gepoorer human resources development

→ Despite continued necessary job reductions Recruitment of junior staff to an appropriate extent

→ Step-by-step application of the "Guide to-The German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) has published its "Sustainable Building 2011" guidelines for construction projects in the state of

→ Imparting knowledge and design competence by prioritizing the training offered by the State Academy for Public Administration

9.3. Billable targets and indicators

The state government will strengthen the orientation of programs and measures to concrete goals. To this end, the goals and indicators of the National Sustainability Strategy are to be applied as far as possible at the state level. In addition, existing indicators will be used primarily at the state level and the application of key indicators will be examined (see chapter 2).

The following steps can be taken to arrive at a system of targets and indicators for Brandenburg:

→ Inventory of the current situation, Preferably on the basis of the federal indicators, using available data.

→ Inventory and analysis of sustainability related country indicators

→ Calculation of the National Welfare Indicator and testing its informative value for Brandenburg

→ Examination of the application of the indicator Ecologi-

footprint in Brandenburg

The state government intends - together with scientists, experts from the administrations and representatives of social groups - to continue this process.

9.4. Sustainability impact assessment

Sustainability impact assessments are intended to support the alignment of policies with sustainability standards. They allow the cross-cutting character to be

and to identify problems and deficits at an early stage.

time to be identified. For this purpose, adapted

The aim is to develop forms in order to keep the costs and benefits in an acceptable ratio. Initial experience with the application of a systematic sustainability audit is available. The following initial steps are intended:

→ Evaluation of previous experience at Bunand state levels, including the test scheme used on a trial basis in Brandenburg; if necessary, existing test schemes should be included.
of subject-specific testing procedures (e.g. strategic environmental assessment, demographic check)

→ Identification of central projects, on which a Sustainability assessment to be applied

9.5. Sustainability management

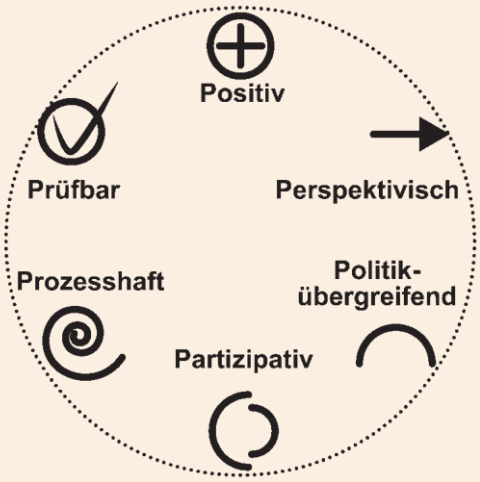
The state government will accompany the implementation of the sustainability strategy with the following elements: Definition of responsibilities and procedures and report on the status of the implementation of the sustainability strategy in the next legislative period

The future state government will decide on the establishment of an interministerial working group and an advisory board to further pursue the sustainability strategy.

Sustainability profile

The basic features of sustainability management can be described by six requirements:

Fig. 26 **Communicating the state sustainability strategy internally and externally with the help of the profile of the 6 "P "s**



Source: Advisory Council for Sustainable Development of the State of Brandenburg

The "6 P's" of sustainability

1. The core of the sustainability strategy is to design a future worth living and to derive concrete goals from this. The aim is to strengthen the will to shape the future and the commitment to it, and to tap new potential through synergies between society, the economy and the environment.

2. perspective Sustainable policy is geared to medium- and long-term goals and action elici requirements.

3. Cross-policy The sustainability approach brings together different dimensions of an issue, particularly in economic, social and ecological terms. This achieves systematic decision preparation and evaluation

.

4. Participatory Sustainability policy involves the various social forces, their activities and projects already in the formulation of goals and in the implementation process, and seeks a broad consensus. This is intended to make politics transparent.

5. process Sustainable development is a social search, learning and design process. It is applied in particular to complex and controversial decisions that require negotiation, reflection and a particularly open, integrated and cooperative approach.
rative policy require.

6. Effective goal- and result-oriented management requires that the achievement of goals be monitored. This requires goals that are as concrete as possible and measurable with indicators. The purpose of monitoring is to control the degree to which objectives are achieved and to monitor the follow-up.

The state government calls on all stakeholders to work on the implementation of the strategy and to help shape the sustainability process with their contributions.

Appendix

Good project examples

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Introduction

Sustainable politics is a democratic process of learning, searching and shaping and cannot be "decreed from above". It draws its strength and vitality from practice. A large number of actors and groups have applied the guiding principle of sustainable development to their field. This has resulted in a large number of projects with impressive results. The following chapter describes a small number of them.

1. Sustainable tourism in Brandenburg

Field of action 2:
Natural resources as economic potential for sustainable regional development In recent years, Brandenburg has successfully positioned itself as an attractive tourist destination with its rich natural and cultural landscapes. Sustainability is playing an increasingly important role in tourism offerings. A successful example of this development is the Uckermark region.

In order to preserve the natural and cultural landscape for future generations, numerous actors in the Uckermark work hand in hand - from tourism and nature conservation to transport and regional energy producers. A network of climate-friendly tourism providers cooperates closely with regional producers and small family businesses. This promotes local communities, increases local added value and creates prospects for sustainable economic development in the long term. Thus, within the framework of the activities, it has been possible to successfully combine the concern of sustainable regional development with the aspect of business development of the tourism service providers (SMEs) by creating economically viable and competitive tourism offers.

Successful cooperation between business and science also plays an important role,
Among others, the Uckermark as a partner region in the INKA BB tourism sub-project "Climate-adapted destination management in the Uckermark travel region".

The preliminary highlight is the award of the Uckermark as the winner of the federal competition "Sustainable
Tourism Regions 2012/2013", a competition organized by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), the German Federal Agency for Nature Conservation (BfN) and the German Tourism Association (DTV), which awards prizes to tourism regions that design their tourism offerings in the spirit of sustainable development.

Actors / Cooperation Partners:
HNE Eberswalde (FH), tmu Tourismus Marketing Uckermark GmbH, tourism service providers, major protected areas & other regional tourism stakeholders

Project Duration:
April 2011 - May 2013 Cooperation project INKA BB; since 2012 Network of climate-friendly tourism providers; January 2013 - May 2014 Cooperation project Development of sustainability mission statement

Project Funding:
Federal Ministry of Education and Research (BMBF) as part of the KLIMZUG (INKA BB) funding measure, East Brandenburg Chamber of Commerce and Industry (development of sustainability model)

More information:
http://www.tourismus-uckermark.de/de/die-uckermark/holidays-for-climate/

Awards:
Uckermark - Winner of the Federal Competition "Sustainable Tourism Regions 2012/2013

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2. F achforce portal

Field of action 4:
"Good Work," Securing Skilled Workers and Strengthening Human Resources

The website offers a comprehensive overview of life and career opportunities in Brandenburg. It contains a range of information for people in Germany and abroad who want to live and work in the state of Brandenburg.

The portal presents the advantages of Brandenburg and provides information on various areas such as work, leisure, family and science. In addition to information on the so-called hard location factors such as the economy and the labor market, soft factors such as culture and tourism are also presented.

The portal, which was developed by LASA and the Ministry of Labor in cooperation with an agency in Potsdam, contains about 50 websites with 1,200 links to life and work in Brandenburg. A navigator currently allows users to click on the careers pages of around 700 companies in 13 branches.

Since the launch in October 2012, more than 98,500 visitors to over 559,266 individual pages of the skilled workers portal (as of 04. 03. 2014).

Project Sponsor:
Ministry of Labor, Social Affairs, Women and Family (MASF)

Project Duration:
Skilled workers portal since 23.10. 2012, skilled workers inform-
mation system since 09.11. 2010

Project Funding:
Supported by the Ministry of Labor, Social Affairs, Women and Family with funds from the European Social Fund and the State of Brandenburg.

More information:
http://www.fachkraefteportal-brandenburg.de/startsei-
te.html; http://fis.zab-brandenburg.de/

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3. Skilled Worker Information System (FIS)

Field of action 4:
"Good Work," Securing Skilled Workers and Strengthening Human Resources

The Skilled Workers Information System (FIS) is a publicly accessible Internet information platform. It contains detailed figures on the labor market and the in the state of Brandenburg and its regions.

A compilation of "occupations in demand" allows conclusions to be drawn about the labor market situation in individual occupational fields. Forecasts on the development of the population and school graduates allow an estimation of the future labor supply up to the district level. The FIS evaluations can be individually edited and downloaded.

In addition to numerous labor market statistics, there are
also detailed studies on individual industries and regions for download.

Project Sponsor:
Ministry of Labor, Social Affairs, Women and Family (MASF)

Project Duration:
Skilled workers portal since 23.10. 2012, skilled workers information system since 09.11. 2010

Project Funding:
Supported by the Ministry of Labor, Social Affairs, Women and Family with funds from the European Social Fund and the State of Brandenburg.

More information:
http://www.fachkraefteportal-brandenburg.de/startseite.html; http://fis.zab-brandenburg.de/

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4. INNOPUNKT initiative "Working Healthy in Brandenburg - Strengthening Corporate Health Policy" and social partner project "Network SMEs - Health Competence for Companies in Brandenburg

Field of action 4:
"Good Work," Securing Skilled Workers and Strengthening Human Resources

Developing and maintaining a skilled workforce is a high priority in the country's labor policy in order to ensure a dynamic national economy geared to the demands of the future. Ne-

n professional qualification and social competence the health and motivation of employees are essential prerequisites for ensuring the competitiveness and economic success of companies.

The INNOPUNKT initiative "Working Healthy in Brandenburg - Strengthening Occupational Health Policy" and the social partner project "Network SMEs - Health Competence for Companies in Brandenburg" aim to improve working and employment conditions in small and medium-sized Brandenburg companies. As part of the INNO- PUNKT initiative, structures for occupational health management (OHM) and occupational health promotion (OHP) are being set up and tested in Brandenburg's small businesses. The social partner project ties in with this goal: It aims to Among other things, an active "Network SME - Health Competence for Companies in Brandenburg" is to be created and the health competence of companies, managers and employees is to be expanded.

Project Sponsor:
Model support program of the Ministry of Labor, Social Affairs, Women and Family (MASF)

Actors/ Collaboration Partners:
Ministry of Labor, Social Affairs, Women and Family, LASA Brandenburg, Zukunftsagentur Brandenburg GmbH, Bildungswerk der Wirtschaft in Berlin und Brandenburg e. V. (bbw), Vereinigung der Unternehmensverbände in Berlin und Brandenburg e. V. (UVB), Deutsche Gewerkschaftsbund - Bezirk Berlin-Brandenburg (DGB), AOK Nordost

Project Duration:
01.12. 2011- 30.11.2014

Project Funding:
Supported by the Ministry of Labor, Social Affairs, Women and Family with funds from the European Social Fund and the State of Brandenburg.

More information:
ht t p: / / w w w. lasa - brandenburg. de/ I n i t i ative - Healthy-working-in- Brandenburg- Occupational-health.1463.0.html

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5. JugendMobil - Model project "Daseinsvorsorge 2030 innovative and modern - a response to demographic change".

Field of action 6:
Mobility

The "JugendMobil" project pursued the goal of working together with young people ("experts in their own cause") to

integrated, demographically stable and financially viable in the long term.
to develop and test innovative strategies, concepts and measures to overcome the structural mobility problems of young people.

The following aspects were worked on within the framework of the project:

- Raising awareness among municipal stakeholders and actors
- Needs assessment by the young people themselves
- Permanent participation offer for the youth through the establishment and consolidation of networks.
- Positive experience of participation among ming youths
- Improvement of the mobility situation across

  regions.
  fend
  - VBB vacation ticket (Facebook page (> 5,600 "likes", discount offers)
  - 50/50 cab ticket (raising awareness of cab drivers through cab cooperative, extending purchase options to citizen stores).
- Improvement of mobility situation on site
  - "flinc" known and usable in regions (Perspective 2020/2030)
  - Passenger information more suitable for young people (Internet pages of the transport companies, facebook page in Elbe-Elster)
  - Creation of a disco bus service in the Kleeblatt region has begun (with the support of young people from Lübbenau).
  - Improvement of the interface between public transport and bicycles in the cloverleaf region ("bicycle detectives" investigate the weak points in the bicycle network).
- Regional expansion of the project
  - Successful transfer in region Spree-

    walddreieck (Discobus - BMI regions profiting from experiences there)
  - Growth core Westlausitz, districts OSL and E-E. with joint survey of all households on

mobility of young people

Project Sponsor:
Deutsche Kinder und Jugendstiftung gemeinnützige GMBH; as of January 2012 Project regions

Actors / Cooperation Partners:
Federal Ministry of the Interior, Ministry of Infra- structure and Agriculture (MIL), municipalities and ac- tors from Kyritz, Finsterwalde, Lübbenau

Project Duration:
2010 - 2013

Project Funding:
Federal Ministry of the Interior within the framework of the model project "Daseinsvorsorge 2030 - Innovativ und mo- dern - a response to demographic change", MIL in the central area of Lübbenau

More information:
http://jugend-mobil.net/

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7. use of physician-relief specialists

Field of action 6:
Mobility

Citizens who want to make use of a public service usually turn to the municipality. Particularly in rural regions, but also in large communities, this is
However, this is often associated with long distances, which is especially

often poses a problem, especially for older people.
This is why politicians and administrators are called upon to develop innovative solutions in order to facilitate access to administrative services.

tion - also against the backdrop of the demographic change - to ensure.

This has been successfully piloted in the city of Wittstock/Dosse with the Mobile Citizen Service. Here, the administration is regularly present in all districts. This means that even in sparsely populated areas, citizens have access to almost the entire range of services offered by a stationary citizens' office. The service, which has received nationwide attention, is provided in a converted minibus. It is made possible by state-of-the-art PC technology housed in a portable suitcase system. Wittstock combines citizen service with the performance of legal tasks, which are processed on site if possible. The state capital Potsdam has also succeeded in implementing a similar service.

For the state of Brandenburg, the importance of the project lies in ensuring the future presence of public administration in the area. The state government will therefore support interested municipalities in introducing a mobile citizen service.

Project Sponsor:
Ministry of the Interior, Brandenburg Association of Towns and Municipalities, Brandenburg IT Service Provider (ZIT- BB)

Actors / Cooperation Partners:
Potsdam Institute for E-Government (IFG.CC), participating municipalities

Project Duration:
In Wittstock and Potsdam, the Mobile Citizen Service has gone into regular operation.

Project Funding:
Municipalities wishing to set up a mobile citizens' service can apply for a grant for 2014 and 2015.

Start-up financing at the Ministry of the Interior be-apply.

More information:
http://www.buerokratieabbau.brandenburg.de/cms/detail.php/bb1.c.296315.en

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7. use of physician-relief specialists

Field of action 8:
Health care

The shortage of doctors in Brandenburg requires

innovative

Measures in medical care. In Brandenburg, a model project based on the AGnES concept (developed by the Institute for Community Medicine at the University of Greifswald) was implemented between 2006 and 2008. AGnES stands for physician-relieving, community-based, e-health-supported, systemic intervention. The physician's workload is reduced by assigning delegable medical services to correspondingly

qualified, non-medical specialists of the practice team be transferred. The AGnES specialist performs these services at the patient's home. The results prompted the legislator to transfer this form of care to standard care and make it a "normal" health insurance benefit. On April 1, 2009, the "AGnES specialist" became the non-physician practice as- sistant.

Under the title agneszwei, the AOK Nordost, the BARMER GEK and the Kassenärztliche Vereinigung Brandenburg (KVB) have launched another project. The focus of the agneszwei specialist's work is on case management for patients who require particularly intensive care. For a period of time determined by the physician, the agneszwei specialist takes over certain medical and organizational tasks on behalf of the attending physician and cares for the patient in his or her environment. The agneszwei specialist can work in

a specialist or family practice, in a network of physicians,
a medical care center or other cooperative structures.
Building on the training in health and medical care, the

(pediatric) nursing, geriatric nursing or as a me-
In addition to the training of medical assistants with at least three years of professional experience or further training as a non-medical practice assistant or with further training as a specialist in outpatient medical care, the agneszwei specialists receive corresponding further training. Currently, 59 trained agnes two specialists are on duty in almost all districts.

Project Sponsor:
AGnES model projects: Institute for Community Medicine at the University of Greifswald, Ministry of Labor, Social Affairs, Health and Family (MASF).
agneszwei Project:: IGiB Innovative Gesundheitsversorgung in Brandenburg (merger of the AOK Nordost, the Barmer GEK and the Kassenärztliche Vereinigung Brandenburg)

Actors / Cooperation Partners:
AGnES model projects:, Institute for Community Medicine of the University of Greifswald, Ministries of Health of the states of Brandenburg, Mecklenburg-Western Pomerania, Saxony, Saxony-Anhalt and Thuringia, Federal Ministry of Transport, Building and Urban Development, Hildebrandt GesundheitsConsult, Hamburg agneszwei project: IGiB Innovative Gesundheitsver- sorgung in Brandenburg (association of the AOK Nordost, Barmer GEK and the Kassenärztliche Vereinigung Brandenburg).

Project Duration:
AGnES model projects 2005 - 2008; agneszwei project: since 2012

Project Funding:
AGnES model projects: Funds from the European Social Fund and the Land
agneszwei project: flat rate per case based on a contract with IGiB

More information:
AGnES model projects: http://www.mugv.brandenburg.de/cms/detail.php/bb1.c.348257.de
Agnes Two: http://www.kvbb.de/igib/projekte/

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8. dentist office on wheels

Field of action 8:
Health care

Dental care in rural areas is increasingly a problem for older people and those with walking difficulties who live in remote areas. Many patients can no longer manage the often long journey to the nearest practice. In the Uckermark region, dentist Dr. med. Kerstin Finger, who has been practicing in Templin for 26 years, developed the idea of a mobile dental practice. A few prerequisites first had to be created for implementation. Unlike a family doctor, who comes to the house with a doctor's bag, a dentist is dependent on a complete, modernly equipped treatment facility. At the home of a tinkerer from Bavaria, she discovered a mobile treatment apparatus that, despite its handy size, delivers full performance and is equipped with water. The unit has a closed system and thus also complies with the strict medical disposal regulations. It is transported in a specially modified vehicle that can also accommodate a wheelchair. The cash card is read electronically on the laptop.

At the end of 2010, the model project for high-quality outpatient dental care in rural areas was launched. It serves not only emergency and acute pain care, but also includes an integrated concept of prophylaxis, curative treatment and social integration.

The model project is scientifically supported and accompanied by research work at the European University Viadrina, Frankfurt/Oder - within the framework of the master's degree program "Complementary Medicine - Cultural Sciences - Healing". As a model, it is to set a precedent nationwide.

Project Sponsor:
Ministry of Infrastructure and Agriculture of the State of Brandenburg, EAFRD Managing Authority

Actors / Cooperation Partners:
Ministry of Infrastructure and Agriculture of the State of Brandenburg (MIL), District of Uckermark

Project Duration:
since end of 2010

Project Funding:
European Agricultural Fund for Rural Development (EAFRD), State of Brandenburg

More information:
http://www.eler.brandenburg.de/sixcms/detail.php/492304

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Internet: http://www.eler.brandenburg.de

9. pretschen - a village sets out for the future

Field of action 9:
Social cohesion

Pretschen is a village in the UNESCO Biosphere Reserve Spreewald with almost 280 inhabitants and a history of over 1000 years. Together with 16 other villages it belongs to the municipality Märkische Heide. The village is characterized by handicraft and commercial enterprises, agriculture and forestry as well as a day care center for children.

te with day care. Important part of the village is the club life, which is supported by the Mroscina e.V., the Kinderland- und Freizeittreff e.V., the Reit- und Fahrverein Pretschen e.V. and the fire department. The inhabitants of Pretschen work actively and self-determined on their future perspective. They show how important it is, as a village, not only to wait for impulses from outside, but to take the shaping of the future into one's own hands and to find answers.

structural, demographic and societal changes. economic change. Through commitment, creativity and joint action of the inhabitants and the establishment of an economic round table in 2005, it has been possible to build up 16 companies with more than 100 jobs. The cooperation of the local companies is exemplary, e.g. between the largest organic chicory cultivation company in Germany, the Pretschener Landgut, the local bakery and the kindergarten. In 2012/13, the village of Pretschen successfully participated in the national competition "Our village has a future" and won a silver medal in this national competition for the most active and attractive village. In 2013, Pretschen drew up a village development concept, which was prepared by a planning office in cooperation with a local village development working group, the business regulars' table and an "editorial commission". Involving the residents played an important role in this process. Based on an analysis of strengths and weaknesses and the development of a mission statement, goals are formulated.

and identified areas for action. Important de The development goal is to strengthen tourism in combination with further economic development and stabilization of the number of inhabitants, contrary to the trend in tourism.

demographic change. Sustainability has a high priority in devel Pretschen's development concept is of central importance.

8. dentist office on wheels

Actors/cooperation partners: Municipal administration Märkische Heide, district, Ministry of Infrastructure and Agriculture, Pretschen business meeting, associations, local fire brigade

Project Duration of Funding Measures:
April - December 2013

Project Funding:
Supported by the municipality, the district, the Ministry of Infrastructure and Agriculture (promotion of integrated rural development - ILE and LEADER).

More information:
http://dorfwettbewerb.bund.de/fileadmin/sites/Start
page/01_Our_village_has_a_future/02b_exclamation_
24_Federal_competition/Pretschen_exclamation_web.pdf

Awards:
Silver Medal Federal Competition "Our Village has a Future" 2013

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11. H_2 -Research Center of BTU Cottbus-Senftenberg

Field of action 10:
Energy turnaround

The ENERTRAG hybrid power plant is to provide practical proof in operation that a secure and sustainable energy supply based on renewable energies - especially wind energy - is possible. The power plant produces hydrogen from wind energy in a climate-neutral manner and generates electricity from it again when required. In this way, it will help to refine the load forecast - an important parameter for the management of an electricity grid - to such an extent that the real electricity production deviates only minimally from the desired one.

The power plant demonstrates how renewable energy systems, for which load forecasting and online control exist, can be bundled using hydrogen technology. This technology enables the long-term, demand-oriented marketing of renewable energies and their use as control energy. As a result, they can be used as so-called control energy. This control energy is needed to balance demand and supply fluctuations in the power grid.

In addition, the direct sale of hydrogen in industry and transport opens up further economically and technologically attractive markets with very large volumes. Hydrogen can be used as a CO_2 -free fuel in the transportation sector. As soon as series-production-ready products are available on the automotive market, the demand for hydrogen will increase by leaps and bounds. As part of this program, ENERTRAG has already signed a cooperation agreement with TO-TAL Deutschland GmbH to research the potential and production costs of wind hydrogen.

The project goals are:

- Construction and trial operation of a power-to-gas Plant in the 250 kilowatt electrical power class (kWel)
- Development of load dynamics/operating concepts ge-
  in line with the flexibility requirements in the electricity market.
- Research operation for plant/operating optimis-
  rung
- Evaluation of the storage operation in the regenerative energy system and the national economy.

Benefits of the technology

Project Sponsor:
ENERTRAG AG

Actors / Cooperation Partners:
ENERTRAG AG , TOTAL Germany GmbH

Project Duration:
since 2011

Project Funding:
Investitionsbank des Landes Brandenburg (ILB), State of Brandenburg, European Union - European Regional Development Fund (ERDF)

Further information:
https:/ / w w w . e n e r t r a g . c o m / p r o j e k t e n t w i c k l u n g / h y b r i d kraftwerk.html
http://www.powertogas.info/power-to-gas/interaktive-project-map/hybrid-power-station-prenzlau.html

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11. H_2 -Research Center of BTU Cottbus-Senftenberg

Field of action 10:
Energy turnaround

The Hydrogen Research Center of the BTU Cottbus-Senftenberg under the direction of the Chair of Power Plant Engineering combines a variety of different research foci in the field of hydrogen technology. Thus, new and innovative topics in the field of energy technology can be researched at the BTU Cottbus-Senftenberg. The topics of the research center include the entire technology chain, from hydrogen production by means of electrolysis, hydrogen storage and its conversion, as well as the investigation of different utilization concepts of the product gases.

Emphasis is also placed on:

- Development of energy storage concepts in the Context with conventional, flexible power plants and the use of surplus energy from PV and wind turbines.
- Development of hybrid power plants for the decentral use for the storage of surplus energy from renewable sources.
- Further development and optimization of the alkali
  pressure electrolysis
- Modeling and simulation
- Public relations work on renewable energies
- Resource education, training and teaching

On September 16, 2010, the cornerstone was laid for the Hydrogen Research Center, which will open on 04 June 2012 was opened as part of the Energy Week at the BTU Cottbus-Senftenberg and ceremonially commissioned together with a 60-bar pressure electrolysis plant.

The pressure electrolysis plant is used for complex testing and optimization of hydrogen production.

from fluctuating wind energy by means of pressure electrolysis and storage of the product gases.

Project Sponsor:
BTU Cottbus-Senftenberg

Actors / Cooperation Partners:
BTU Cottbus-Senftenberg, ENERTRAG AG

Project Duration:
since 2010

Project Funding:
Investitionsbank des Landes Brandenburg (ILB), State of Brandenburg, Federal Ministry of Education and Research (BMBF), European Union - European Regional Development Fund (ERDF)

Further information:
http://www.powertogas.info/power-to-gas/interaktive-projektkarte/h2-forschungszentrum-der-btu-cottbus. html
http://www.kwt-cottbus.de/de/wasserstoff_forschungscenter.html

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12 WindGas Falkenhagen

Field of action 10:
Energy turnaround

In August 2013, E.ON commissioned a power-to-gas pilot plant in Fal- kenhagen, Brandenburg, to convert electricity from wind power into hydrogen. The site was chosen because of the high volume of wind-generated electricity and its proximity to the electricity and gas infrastructure. The plant produces around 360 standard cubic meters of hydrogen per hour from regeneratively generated electricity using alkaline electrolysis. The hydrogen produced is fed into the Ontras long-distance gas grid.

E.ON intends to intensively test and further develop this technology in Falkenhagen. The plant demonstrates the entire process chain - from taking over the wind power to generating and feeding hydrogen into the natural gas grid. The project is being carried out in cooperation with SWISSGAS AG, which is both involved in the investment and will purchase some of the hydrogen produced during the pilot phase.

"Power to Gas" makes the immense energy storage capacity that lies in the nationwide natural gas infrastructure available for renewably generated energy. The technology can provide an essential function in balancing volatile generation in wind power and photovoltaics. The chemically bonded energy in the form of hydrogen is also available to various markets, such as the electricity and heat markets, industrial applications and mobility. The need for storage capacities is growing with the expansion of renewable energies.

Project Sponsor:
E.ON

Actors / Cooperation Partners:
SWISSGAS AG

Project Duration:
2013 - 2015 (operational)

Project Funding:
none

Further information: http://www.eon.com/de/ueber-uns/innovation/projekte. html
http://www.powertogas.info/power-to-gas/interaktive-project-map/pilot-plant-falkenhagen.html

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13. B atterien von Elektrofahrzeugen als mobile Speicher, Beitrag zur Netzentlastung - Projekt e-SolCar

Field of action 10:
Energy turnaround

The Renewable Energy Sources Act, which came into force in 2000, made it possible to feed renewable energies into the power grid on a priority basis and independently of demand, without any economic losses. As a result, there was an expansion of renewable energies, which significantly increased their share in the electricity mix, especially in eastern Germany. Since electricity cannot be stored in large quantities, generation must follow consumption "to the minute." But with renewables, the amount generated - and thus the amount fed into the grid - can only be predicted to a limited extent, as it is subject to strong fluctuations (depending on the weather). This makes it increasingly difficult for energy suppliers to guarantee the stability of the energy grid. In addition, more control energy must be provided to compensate for short-term power fluctuations. Due to the high CO_2 pollution caused by conventionally powered cars, the German government is pursuing the goal of increasing the number of electric vehicles registered in Germany to one million by 2020. This is because e-cars can be CO_2 -neutral if they draw on renewable energies. In an economic comparison, electric vehicles still rank behind conventional vehicles. Research and development therefore aim to change this in order to make electric vehicles suitable for mass production. The motivation for the e-SolCar project is based on these two topics. On the one hand, there is the storage problem and the challenge of providing sufficient positive or negative control power. Here, electric cars can contribute to the solution. On the other hand, electric vehicles are not yet sufficiently economical. Research is being conducted in both areas as part of the project. The energy supplier Vattenfall Europe Generation AG, the vehicle manufacturer Ger- man E-Cars Research & Development GmbH and the BTU Cottbus-Senftenberg are cooperating in this project. The goal is to use electric vehicles as storage units in special grid situations. To this end, bidirectional charging is being developed so that the cars can be charged or discharged in a controlled manner according to the requirements of the grid. Initial experience is also to be gathered.

how the cars can be used in everyday life and how they are accepted by customers. In addition, the project addresses the question of the extent to which electricity grid problems can arise when many electric cars are connected and how these can be solved intelligently. The project at BTU Cottbus-Senftenberg includes a photovoltaic system with an output of 100 kilowatts peak power (kWP) on the roof of the FMPA buildings, a battery storage system with a usable capacity of 500 kWh, and 15 charging stations located directly in front of the building.

are located. The electric cars are primarily equipped with of the photovoltaic system and the battery storage system. If this is not sufficient, the utility grid is included.

Project Sponsor:
BTU Cottbus-Senftenberg

Actors / Cooperation Partners:
BTU Cottbus-Senftenberg , Vattenfall Europe Mining & Generation AG, German E Cars R & D GmbH

Project Duration:
Mid 2011 until fall 2014

Project Funding:
European Union - European Regional Development Fund (ERDF), State of Brandenburg

More information:
http://www.tu-cottbus.de/einrichtungen/cebra/forschung/e-solcar.html

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14. Innovation Network Climate Adaptation Brandenburg Berlin (Inca BB)

Field of action 11:
Adaptation to the consequences of climate change

INKA BB - the Innovation Network for Climate Adaptation Brandenburg Berlin - aims to develop adaptation strategies for climate change and to identify innovative solutions. The focus is on the promotion of sustainable land and water use in the region, but also on adapted health management. For this purpose, INKA BB bundles the competences of research institutions, interest groups, business enterprises as well as municipal administrations and state authorities from the region and enables them to develop and apply innovative adaptation strategies.

INKA BB brings together actors from science and practice who, in 24 sub-projects, develop and test possibilities for adapting to climate change in the fields of agriculture and forestry, water management, regional planning, tourism, nature conservation and health care. In doing so, not only the risks but also the opportunities of climate change are taken into account. The network works in Brandenburg with a state-wide focus. Location- and business-related measures are mainly located in the regions of Lausitz-Spreewald and Uckermark-Barnim as well as in the metropolis of Berlin. The result is recommendations for action, information materials, consulting tools and decision support systems that are available online. The long-term science-practice cooperation leads to the formation of research networks that will continue to exist even after the project funding ends.

The joint project is scheduled for five years and is funded by the Federal Ministry of Education and Research. The project is coordinated by the Leibniz Center for Agricultural Landscape Research in Müncheberg (ZALF).

Project Sponsor:
Consortium of 14 research institutions

Actors / Cooperation Partners:
Network with almost 100 organizations from science, business, politics and administration

Project Duration:
05/2009 - 04/2014

Project Funding:
Federal Ministry of Education and Research (BMBF) as part of the KLIMZUG funding measure

More information:
http://www.inka-bb.de/

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15th Climate Platform - Research Platform on Climate Change

Field of action 11:
Adaptation to climate change

In 2008, the Climate Platform was initiated by the Ministry of Science, Research and Culture (MWFK), the Geo- Research Centre Potsdam (GFZ) and the Potsdam Institute for Climate Impact Research (PIK) as a research platform on climate change. With currently 26 member institutions, the non-profit association Klimaplatt- form, founded in 2009, networks the expertise in the fields of climate change, climate protection and adaptation available at universities and non-university research institutions in the states of Brandenburg and Berlin. It represents the interface between research, application and practice in these fields. The climate platform is based on the conviction that Brandenburg must use its special potential in research and economy as well as its natural and agricultural resources to face the challenges of climate change and to develop solutions for the energy supply of the future. The Climate Platform is the coordinating umbrella across the various climate-relevant scientific subfields of climate, energy and land use. In 2012, the Research Platform Rural Areas Berlin-Brandenburg was able to integrate its expertise on sustainable rural development into the Climate Platform.

be integrated. Defined as its 3 main tasks
the climate platform: (1) to act as an interface between science and practice, (2) to network research expertise, and (3) to promote young scientists. The overall goal is to increase the competitiveness of research and technology development and the attractiveness of the science and business location, as well as to position the Brandenburg-Berlin area as a model region for scientific understanding and dealing with the consequences of climate change in the national and international context. Under the direction of the Climate Platform as the Climate Office for the Northeast, the Climate Platform and partners invited to six interactive Regional Climate Cafés from the region Uckermark-Barnim in the north to the Elbe- Elsterkreis in the south, funded by MIL and MUGV with lottery funds. Stakeholders from politics, administration, business and science discuss the following topics at the interactive events of the climate platform from the point of view that climate change means not only risk but also opportunity for the state and the region, the knowledge of climate change and possible impacts. The competencies of the Climate Platform offer a variety of approaches for projects on mitigation and adaptation in the Brandenburg-Berlin region and dealing with the consequences of climate change.

Project Sponsor:
2008 - 2012 Ministry of Science, Research and Culture (MWFK), since 2012 GFZ and PIK as well as member institutions

Actors/ Collaboration Partners:
26 full members, including Berlin universities and research institutions as well as various partners from the business community

Project Duration:
2008 - 2011 Ministry of Science, Research and Culture (MWFK), unlimited association activity

Project Funding:
2008 - 2011 Funding by the MWFK of a coordination office jointly staffed by the GFZ and PIK, since 2012 continuation by the GFZ and PIK as well as the member institutions.

More information:
http://www.klimaplattform.de/

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16. effective and efficient control in the area of the tax administration

Field of action 13:
Budgetary policy and administrative management The ability to act in terms of financial policy is the foundation of any policy geared to sustainability. Securing tax revenues as the state's main source of income is of paramount importance. The task of the state's tax offices is to assess and collect taxes uniformly. Against the backdrop of the state's human resources planning, the tax administration uses modern control insti instruments to increase efficiency and effectiveness.

Since 2006, the tax offices have been area-
The company is managed by a controlling/contract management system that covers almost all the areas of responsibility of a tax office. Content-related focal points and individual agreements make it possible to steer the performance of tasks in the sense of a sustainable budget policy in a target- and result-oriented manner.

By including the target dimensions "citizen's perspective" and "employee's perspective" in the balanced key performance indicator system, further sustainability aspects are integrated into the controlling procedure. These target dimensions are filled out by regular surveys, among other things on offers with social and ecological aspects (e.g., home-work-
flexible working hours, presence in the area).

With the technological decision to support the controlling process with its own database and professional evaluation tools, Brandenburg has a very advanced level of development compared to the rest of Germany.

The importance of internal state controlling is strengthened by federal-state controlling in accordance with Section 21a of the Financial Administration Act. In this context, the federal government and the individual states agree on bilateral implementation targets. In this way, the federal government aims to secure sustainable tax revenues on a nationwide basis.

Project Sponsor:
Financial management Brandenburg

Actors / Cooperation Partners:
Ministry of Finance, tax offices

Project Duration:
Unlimited

Project Funding:
none

Contact: Ministry of
Finance Department 34
Heinrich Mann Avenue 107
14473 Potsdam

17. inclusion in the state of

Field of action 15:
Sustainable education

Brandenburg - like other states - is on the way to an inclusive school landscape. 42 percent of all children with special educational needs already attend mainstream schools. The development in Brandenburg already began in the 1990s. In spring 2011, there were regional conferences throughout the state. The Round Table on Inclusive Education and the Scientific Advisory Board on Inclusive Education have been supporting the Ministry of Education since fall 2011.

Starting in the 2012/2013 school year, the pilot project "Inclusive Elementary School" was launched at 84 elementary schools and high schools in Brandenburg. At these schools, all children with learning support needs, language difficulties and social behavioral problems are also included and - if there is agreement with the parents - there is no need to conduct a funding committee procedure.

Uniform framework conditions apply to the participating public schools for the pilot phase. The schools have been given around 120 additional teacher positions and work according to a school-internal teaching concept based on the framework curricula for elementary schools. The frequency benchmark for forming classes is 23 students. The important pillars of the project include in-service training for teachers and scientific support.

The goal of the pilot project is to apply the lessons learned from collaborative teaching toward a "School for All" in the state of Brandenburg. The experience gained from the pilot projects will be of great benefit to the stakeholders involved in inclusion, including school administrators and teachers, parents, students and schools, as well as the Ministry of Education, the school boards and the state education authorities.
and the extracurricular partners - benefit.

Project Sponsor:
Ministry of Education, Youth and Sports (MBJS)

Actors / Cooperation Partners:
Ministry of Education, Youth and Sports (MBJS), state education authorities, schools in the pilot project "Inclusive Elementary School

Project Duration:
School year 2012/2013 to 2014/2015

Project Funding:
Brandenburg state

More information:
http://www.inklusion-brandenburg.de
Brochure:http://www.inklusion-brandenburg.de/fileadmin/data/service/publications/concepts/Broschuere_Schule_fuer_alle Okt.2013_.pdf

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18th Brandenburg Development Education Program and Information Days (BREBIT)

Field of action 16:
Education for sustainable development

The BREBIT are Brandenburg Development Policy Education and Information Days. Organized by committed people from different

development associations, they have found since 2004 takes place every year in the fall throughout the state of Brandenburg. For two weeks, more than 100 events take place, such as project days and workshops at schools, film evenings, exhibitions, readings and discussions. BREBIT has a special motto each year, which is based on the themes of the UN Decade of Education for Sustainable Development. The content of these themes is linked to the eight UN Millennium Development Goals. BREBIT draws people's attention to global problems in our "One World", encourages them to show more solidarity with people in other countries and works with them to find possible solutions. The focus is on the interrelations between the countries of the North and the countries of the South, i.e. the so-called developing countries in Africa, Latin America and Asia. In the BREBIT events, the question "What does our lifestyle have to do with the working and living conditions of people in so-called developing countries?" plays a major role. BREBIT provides children and young people in particular with the knowledge and skills they need to think globally and act locally. BREBIT motivates people to take responsibility for themselves and their actions in a global context in order to contribute to a more sustainable development.

globally just and sustainable lifestyle.

the. At the same time, BREBIT supports education policy actors in their work and in networking with each other, promotes the exchange of experience and publicizes local initiatives. In addition, BREBIT aims to enrich the educational and cultural offerings in the state of Brandenburg with its events and to contribute to more cosmopolitanism overall. BREBIT gives educational actors a platform for their work by supporting them to get in touch with people, schools, institutions and to engage in a dialogue. The BREBIT offers development policy education officers, institutions and associations

the thematic framework, the logistics and the contacts. At the same time, it brings the thematic offers to schools, extracurricular educational institutions and associations. In this way, the UN Millennium Development Goals, for example, can be integrated into school lessons in an inter- active way. BREBIT's continuous work with teachers over a period of years raises pupils' awareness of global problems. BREBIT is managed by a coordination group.

Project Sponsor:
Democracy and Integration Brandenburg e. V., RAA Brandenburg Team: BREBIT Coordination Group: Carpus e. V., Gesellschaft für solidarische Entwicklungszusammenarbeit (GSE) e.V., VENROB e. V., INKOTA-netzwerk e. V.

Actors / Cooperation Partners:
Stakeholders from different development policy associations

Project Duration:
Since 2004

Project Funding:
Federal Ministry for Economic Cooperation and Development, State of Brandenburg, North-South Bridges Foundation. Individual events are supported by the EED and the Catholic Fund.

More information:
http://www.brebit.org

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19th "Junior Ranger" program of the nature guard - junior rangers explore the nature

Field of action 16:
Education for sustainable development

Great streams, dry heaths, flowering meadows, wild forests, secret moors, quiet lakes: Brandenburg's natural and cultural landscape is rich in diversity.

habitats with their animal and plant species.
The National Natural Landscapes create the framework conditions for a third of the country's

area makes targeted contributions to the preservation of the Biological
diversity and sustainable development can be achieved.

This is also the home of the Junior Rangers, who have been discovering the biological diversity of their region together with the rangers since 1994 as part of a program run by the Brandenburg Nature Guard, learning to recognize connections and looking for points of connection to their own lives. Experiencing, discovering and acting together inspires the boys and girls. At the same time, it constantly raises new questions. These relate not only to ecological, but also to eco- nomic, social and cultural backgrounds.

In their search for answers, the junior rangers work with the nature guard staff to develop their own projects in which they can become active themselves and also inspire others to join their cause. Examples include: Seeing the floodplain with children's eyes, the urban-rural project, Kehr wieder, partnership for orchards and projects on different habitats and species such as the "returning wolf".

Due to the long-term nature and continuity of the program, the Junior Rangers learn and practice design skills and responsible interaction with each other and with nature.

Project Sponsor:
Naturwacht Brandenburg
Actors/cooperation partners:
Naturwacht Brandenburg/National Natural Landscapes of Brandenburg, nature conservation organizations, associations and other sustainability stakeholders.

Project Duration:
since 1994, unlimited

Project Funding:
none

More information:
http://www.naturwacht.de/jugend-freiwillige/junior- ranger

Brochure
http://www.naturwacht.de/fileadmin/naturwacht.
en/ f ilebase/ Publications_Downloads/JR- Bro
sch%C3%BCre_end_komp.pdf.
http://www.junior-ranger.de

Awards:
2007 as a project of the UN Decade of Education for Sustainable Development;
2009 Receipt of this predicate for another two years

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20. from the UN Decade of Education for Sustainable Development

(BNE)" awarded projects in the state of Brandenburg

Field of action 16:
Education for sustainable development

The implementation of sustainable development requires appropriate education. The United Nations (UN) has therefore proclaimed the World Decade of Education for Sustainable Development for the years 2005 to 2014. The coordination of this task has been assigned to UNESCO. In Germany, the task is performed by the German UNESCO Commission (DUK).

Germany adopted a National Action Plan on ESD in 2005. Its goal is to permanently anchor the concept of sustainable development in all areas of education in Germany. Numerous states, including Brandenburg, have adopted state action plans for ESD.

As part of the UN Decade, the following events have taken place in
In the state of Brandenburg, numerous projects in all areas of education are taking place in the context of education for sustainable development. These are summarized in a database.

Actors:
Working Group for Nature and Environmental Education in Brandenburg (ANU), Brandenburg Development Education and Information Days (BREBIT), BUND-jugend Brandenburg, Carpus e. V., HochVier e. V., Brandenburg Ministry of Education, Youth and Sports (MBJS), Naturwacht Brandenburg, Baruth Forestry Division of the Brandenburg State Forestry Office.

Project Duration:
UN - Decade 2005 - 2014

Project Funding:
a. o. Federal Ministry of Education and Research (BMBF), sponsoring by companies

More information:
http://www.dekade.org/datenbank/index.php
Under Decade Projects select State of Brandenburg and start search, then all Decade Projects in Brandenburg will be displayed.

Award by:
German UNESCO Commission e. V.

Contact person:
German Commission for UNESCO e. V.
Secretariat UN Decade of Education for Sustainable Development
Langwartweg 72
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E-mail: http://www.bne-portal.de/kontaktformular/
Internet: http://www.bne-portal.de

21. Sustainability coordinators for the construction of buildings

Sustainability as a political process - state government as a role model

The Brandenburg State Office for Real Estate and Construction (BLB) has employees trained as so-called sustainability coordinators for the construction of federal buildings. The training is carried out centrally for all federal states on behalf of the Federal Ministry of Building.

ums. It qualifies the employees to carry out all office

The aim of the project is to design and build administrative buildings for the federal government in Brandenburg in a holistic and sustainable manner. The result should be buildings of good ecological, economic, socio-cultural and functional quality. Since 2012, major new construction projects of the federal government have to be implemented in accordance with the federal government's "Sustainable Building" guidelines.

In preparation for this regulation, the Brandenburgische Landesbetrieb für Liegenschaften und Bauen already had four sustainability coordi- nators trained for federal construction in 2011 and 2012. In year

In 2013, the qualification was extended with three additional employees.

continued.

In this way, the federal and state governments are fulfilling their special role model function as public builders.

Project Sponsor:

Brandenburg State Office for Real Estate and Construction (BLB)

Actors / Cooperation Partners:

Brandenburg State Office for Real Estate and Construction (BLB), Federal Construction Division in the Saarland Ministry of Finance and Europe

Project Duration:

since 2012

Project Funding:

none

Further information:

http://www.blb.brandenburg.de/cms/detail.php/bb1.c.321196.de?highlight=sustainable+building

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22. One hundred percent green electricity for state authorities

Sustainability as a political process - state government as a role model

In its coalition agreement, the Brandenburg state government set itself the goal of taking concrete measures to protect the climate and use renewable energy. The decision by the Brandenburg State Office for Real Estate and Construction to purchase only electricity from renewable energy sources from the beginning of 2014 represents concrete measures to this end. All authorities, universities and other public institutions in the state of Brandenburg will use 100 percent electricity from renewable sources from January 1, 2014.

The Brandenburg State Office for Real Estate and Construction (BLB) manages around 700 state properties and is also responsible for their energy supply.

By purchasing only green electricity, SU is going beyond a corresponding resolution passed by the state parliament in 2011. According to this resolution, the next planned invitation to tender should only aim for a 100 percent share of renewable energies.

The suppliers will be Stadtwerke Potsdam and Stadtwerke Cottbus. Following a Europe-wide invitation to tender for around 2,500 delivery points and 116 million kilowatt hours (kWh) per year, they prevailed among seven bidders.

With the power supply from renewable energies, the state administration saves about 20,000 tons of climate-damaging carbon dioxide annually. This corresponds to the annual electricity consumption of around 9,900 households. By fully supplying green electricity, the state administration will further reduce its CO_2 emissions and thus make an important contribution to implementing the state's own energy strategy. At 73 percent, the share of green electricity was already above the required target of 50 percent.

Due to the full supply with green electricity, the

country no additional financial burden. In the training The most favorable offers corresponded to the prices for an electricity mix.

Project Sponsor:
Brandenburg State Office for Real Estate and Construction (BLB)

Project Duration:
since 2014

Project Funding:
none

Further information:
http://www.blb.brandenburg.de/cms/detail.php/bb1.c.335895.de?highlight=%C3%96kostrom

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23. Environmental certification of the vehicle fleet of the Brandenburg State Office for Real Estate and Construction according to EMAS

Sustainability as a political process - state government as a role model

The vehicle fleet of the Brandenburg State Office for Real Estate and Construction (BLB) has had an environmental management system in accordance with EMAS since 2012. EMAS (Eco-Management and Audit Scheme) is an environmental management and auditing instrument developed by the European Community in 1993 for companies that want to improve their environmental performance.

We want to continuously improve our products and services. It obligates

The company must consider environmental protection as a complementary part of its original corporate objective.

Environmentally conscious action, in particular the reduction of consumption values and emissions, requires detailed knowledge of current consumption levels.

of the vehicle fleet. These are tested as part of the cer-

tification were determined and evaluated. The resulting The resulting findings form the basis for improving the eco-balance of the vehicle fleet - by means of specific

defined goals - to constantly improve.

Through the transparency and disclosure of all environmentally relevant data, SU's vehicle fleet also promises to sensitize its customers to ecological and sustainable mobility. Sustainable and environmentally conscious criteria are taken into account as early as the vehicle procurement stage. In addition, the entire operational process is designed to conserve resources as much as possible.

Currently, SU's vehicle fleet is planning to participate in an electromobility pro- ject.

Project Sponsor:
Brandenburg State Office for Real Estate and Construction (BLB)

Project Duration:
since 2011

Project Funding:
none

Further information:
http://www.blb.brandenburg.de/cms/detail.php/bb1.c.307140.de
http://www.blb.brandenburg.de/sixcms/media.php/4055/EMAS_BLB_Environmental_Declaration.pdf

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