EL-EFF Region

Saxon Regional Action Plan on Electric Efficiency

Presented by: GERTEC and SAENA

Intelligent Energy Europe

EL-EFF REGION

WP 3: Regional action plan

1 Background

The federal state of Saxony is located in Eastern Germany. Poland in the East and the Czech Republic in the South border it. The state has an area of 18,415 km^2 and about 4,235 million inhabitants. Dresden is the capital of Saxony.

Saxony has a long industrial tradition. There was silver mining in the Erz Mountains. Other traditional industries include textiles and mechanical engineering. Today Saxony has a reputation as a high-tech location e. g. in microelectronics, photovoltaics, telematics, biotechnology, environmental technology, new materials, or processing technology.
Nearly one third of the state's population live in Dresden, Leipzig and Chemnitz - the biggest cities. A decrease of the population is predicted and will have a noticeable impact on energy consumption.
The electricity generation is mainly based on brown coal, complemented by gas-fired generation (Energieversorgung in Sachsen, Statistisches Landesamt, 2008). Within the last 8 years the share of renewables could have been enlarged by the factor of 6 (ref. Umweltbericht 2007, SMUL).

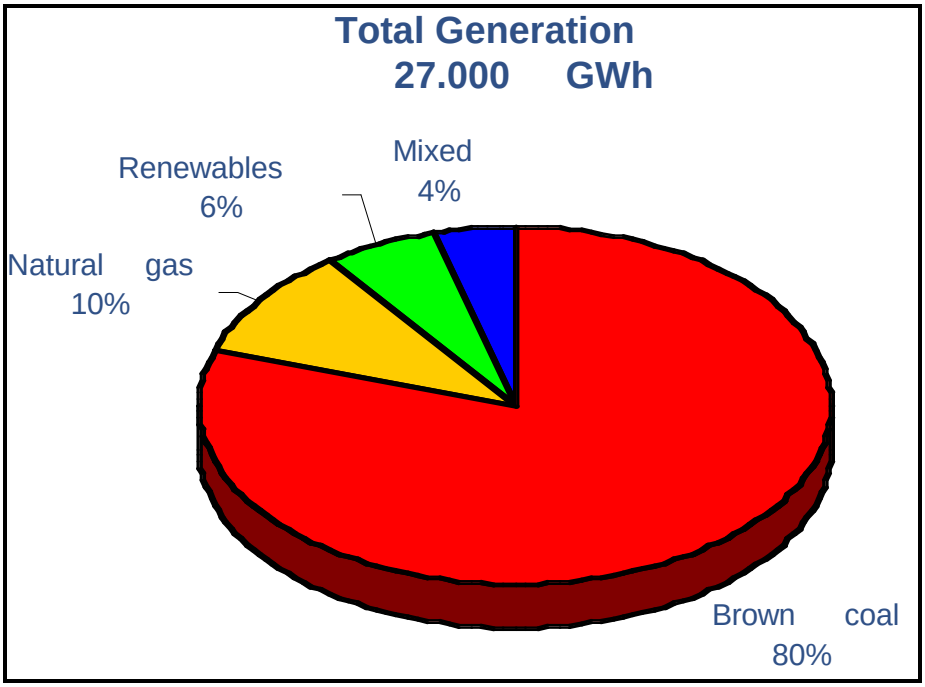

Diagram 1: Power generation in the federal State of Saxony

The end energy consumption is mainly divided in three equivalent sectors: Industry, service sector and households. In the years between 2001 and 2005 the consumption of electricity of the household sector in Germany has risen by only 5 %. In 2007 the consumption could be reduced by 1 %.
The consumption of the third sector could have been reduced by 8 % between 2002 and 2005. Because of increases of the GDP there was an increase in electricity consumption of the industry from 2003 to 2004 (ref. AG Energiebilanzen). In the industrial sector a trend of using electricity instead of other energy was found. The reasons are the good possibility of regulation and less emission at the point of use.

This regional action plan is elaborated in the framework of EL-EFF Region project, which promotes the efficient use of electricity in 8 European regions. The suggestions are based on specific experiences in Saxony, discussions with Saxon stakeholders, experience exchange on European level of the project partners and on expert know how of Wuppertal-Institute (WI). This Regional Action Plan (RAP) is a deliverable of EL-EFF Region project.

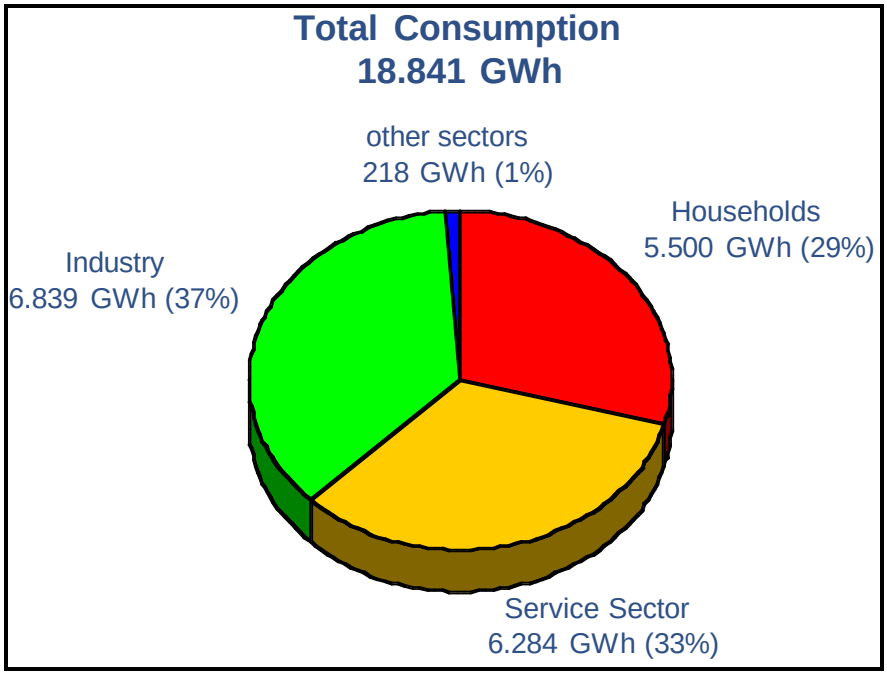

Diagram 2: Sectoral consumption of electric energy in the federal State of Saxony

Picture 1: Brown coal power plant Boxberg, Saxony

Picture 2: New energy system PV near Meerane

1.2 Energy policy targets

In 2001 the Saxonian government has passed its “Climate Protection Program”. The major targets were:
• the use of 5 % of renewable energies at the end-energy consumption in Saxony until 2010;
• the reduction of 2.5 million t of CO_2- in the areas of industry, private households, tertiary sector and traffic until 2010 compared to 1998. This means an energy-reduction of about 5.5 % vs. 1998. (Electricity was exported from Saxony). In 2003 the target was exceeded by 1.2 million tons which means a reduction of about 8 %. In 2004 the “Energy Plan Saxony” was launched as a follow up of the climate protection plan 2001.

In 2008 the “Action Plan Climate and Energy” was formulated. It includes more than 200 measures regarding climate protection, sustainable energy supply and climate change adoption. Energy efficiency and the use of renewable energies are treated as cross sectoral issues. The action plan incorporates

- the delivery of guidelines, internet tools and brochures
- other public relation activities promoting energy efficiency such as media campaigns
- pilot projects on efficiency in households using innovative approaches
- the efficient design and construction of public buildings and
- the promotion of energy saving as well as the use of renewables in the agricultural sector.

Furthermore in March 2009 the government of the Federal State of Saxony presented their “New aims of future climate protection and energy policy”. They proclaim a CO_2-reduction in ‘no-emission trade sector’ of 26% in 14 years, which means about 17 % in 9 years if you assume a linear development. At the website of the Saxon Ministry for environment and agriculture (http://www.umwelt.sachsen.de/umwelt/download/Tabelle_Stand_Umsetzung.pdf) an overview of the state of the climate protection measures is presented. At the presentation of the new aims the Saxon government confirmed the support of the national climate protection policy.

In the beginning of 2009 the National Ministry of Environment (BMU) published their “Roadmap energy policy 2009”. It explains the strategy and implementation of the NEEP II.
There are parallel approaches to greater efficiency of electricity use of the national and federal government (comparison between ways of “Roadmap 2009” of national Ministry – BMU and policy of federal government – “Action plan 2008”). The following list shows these parallel approaches:

- Energy advice for little income households
- Optimization of energy advice
- Support of high efficient technologies
- Smart metering
- Top-runner.

60 million Euros will be provided in Saxony for energy efficiency and climate protection till 2013 by the federal government.

The project partner SAENA was founded in 2007 by initiative of the federal government. SAENA acts as Saxon competence centre in the field of energy. With its work program SAENA contributes to implement the measures of the “Action Plan Climate and Energy” and to its further development. Since 2007 SAENA has been continuously involved in defining the tasks and measures of the Saxon climate protection and energy strategy.
SAENA participated in three conferences. Furthermore several work meetings took place. Three work groups had been launched. SAENA delegated one member per work group. Other members were high-class representatives of the Saxon Ministries.

Within this process elements and expertise of the EL-EFF Region project have been included in the “Energy Plan Saxony”. For example the El-EFF campaign on electricity efficiency in households became part of the energy plan. Its implementation and financing will be ensured by SAENA.

Emission Trade system (ETS)
According the European ETS all the CO_2-emissions of the power generation and central industrial sectors are fixed until 2012. Electricity savings reduce the stress on the electricity suppliers to reduce emissions now.
On the other hand reductions of electricity use lead instantly to reduced energy costs and harm on the environment. Maybe the activities of individuals and companies in the prevention of climate change increase the pressure on the politicians to find efficient ways to save the climate and to reduce the caps significantly after the year 2012.

Remark on tariff structure
There are fewer alterations in tariff structure than expected. The framework of the tariff system is regulated on national level (elements of the bills) by the ‘energy economy act’ (Energiewirtschaftsgesetz Teil 4). According to this regulation, no federal guidelines can be made. Until the end of 2010 special tariffs according to the load (or the time of the day) will be offered by the utilities. A pilot project about smart metering has recently been launched on national level. No trends can be foreseen yet. The price for the peak load is mainly influenced by the price for the use of the grid. There is a rise in electricity prices as a result of the rising energy prices in general and as a result of ecologic demands.

In Saxony the Saxon Energy Agency SAENA launched a pilot project “Smart metering” end of 2008. Within this project smart meters will be installed in one school and one enterprise. The measured dates will be publish at the project website

http://smartmeter.saena.de/. The project activities will be linked to activities at schools following up this topic. Information on smart metering are presented at the website and within a leaflet (http://www.saena.de/media/files/Upload/PDF_Inhalt/Aktuelles/Publikationen/smart_metering_final.pdf). Further public relation is done on fairs and other events, as well as by press.

2 Target Groups and Stakeholders

The target groups of the project EL-EFF Region in the federal state of Saxony focuses on the electricity use in

- private households and
- agriculture.

Private households were chosen because of the importance of this sector (about 1/3 of electricity consumption). Within the last years the consumption per capita increased.
Agriculture was selected by reason that it played a minor role in the former climate saving strategy, which should be changed. A network of interested subjects arises - stakeholder of this sector proclaimed their interest in efficient energy use.

Finally the public sector has been integrated. If the federal government wants to influence people, it has to show that it is a model consumer.

The regional project partners generated a list of stakeholders for electric energy use in both chosen sectors. 20 stakeholders were selected for interviews about assumptions of the future of energy saving (see reference list in annex). High-level representatives of energy consumer organisations (private households and agriculture) as well as suppliers have been chosen. Additionally representatives of federal ministries and energy managers of public buildings were involved.

All of them were asked about

- consumption prediction (scenarios)
- activities implemented and relevant actors for promoting efficient energy use
- potential co-operations and key actors for future activities
- experiences and starting points for extensive public relation media work.

Two intercommunion meetings (called “round tables”) for private households and agriculture have been organised (see lists of invited persons in the annex). Guidelines for the action plan have been formulated and first steps to realization have been discussed.

The contacts have been used for the implementation of the technical seminar, the action packages and the awareness campaign.

Expertises of the EL-EFF Region project are integrated in the Saxon climate protection and energy activities by the Saxon Energy Agency SAENA.

3 Benefits and Main Barriers

In Germany a broader discussion about climate change started in the beginning of 2008. Activities to save energy are well accepted by the society. Because of the intensive use of brown coal and the related emissions (more than 50 % according own calculations) the efficient use of electricity is of immense importance for the German climate protection strategy.
Between January 2007 and July 2008 a substantial rise in electricity prices (e.g. 55% in the third sector: VIK Mitteilungen 5/08) took place. Investing in efficiency became more economic. Concerning the risen process, the federal Ministries recognised the relevance of energy efficiency.

In the field of solar energy, the activities of the federal government as well as the private companies in the federal state of Saxony have been very successful. 2,500 jobs could have been created within the last years. About 750,000 square meters of photovoltaics have been installed generating 76 GWh of electricity in 2007 (SMUL, Umweltbericht 2007). Several manufactures of photovoltaic plants settled in Saxony. The development in the remaining renewable energy sector is formed mainly by supplier of plant components and plant operators. In the whole renewable energy sector in total round about 6,500 jobs and a turnover of 2.1 Mrd. Euro have been generated in Saxony by 2007 (SAENA, Studie: Erfassung der Beschäftigungs- und Umsatzentwicklungen durch die Nutzung Erneuerbarer Energien im Freistaat Sachsen für das Jahr 2007).

The start up of new companies for energy efficiency and energy services would be an excellent addition in terms of sustainability. The positive experiences of the photovoltaic industry can bee used for the further development of the remaining sectors.

Companies can improve their image and media perception by activities in the field of climate protection. Demonstrations against the realization of new coal based power plants have been organised – energy saving can make a bigger contribution to the energy supply with a good economic balance.

By the suggested measures the Saxonian partners of the EL-EFF Region project want to address the central target groups of private households and agriculture as well as the public sector (because of the role as an exemplary model).

Monitoring
The suggested activities (of federal state administration, manufacturers, retailers, consulting and public relation agencies) will include pilot projects in order to monitor

results by growing implementation. The pilot projects will be planned and complemented at federal state level.
For the monitoring of the household sector savings can be calculated by typical operation times.

4 Suggested projects

Germanys national allocation plan (NAP II, November 2007) includes elements how to reduce the delivered energy by 9 % (compared to the period 2001 to 2005) until 2016.
The third sector (including the public buildings) and private households are as well in focus. **Lighting, pumps and motors** are the most promising technical fields to reach the goal.
Benchmarks and best practice examples can help in that field. Information, motivation, advice, education, research, networking and financial supporting are the preferred ways to address consumers by elaborated media work. The annex contains an overview table with first suggested projects.

The share of the different activities is under discussion either on national or on federal level.
The share of the different federal states cannot be foreseen. There will be lower targets for the eastern states as e.g. Saxony, which has reduced the CO_2-Emissions by 62 % from 1990 to 1998. There will be substantial discussions about “early actions”.
In the NAP II disproportionate reductions are expected by the third sector and the industry.

In the following chapter three energy saving projects are drafted. The objectives as well as framework and expected results are presented. These projects have become part of federal plans and will be implemented in the future. The exact conditions of implementation are not fixed yet (for example the dissemination of the street lighting project). All budgets are estimated. Some of the potential partners announced their will to cooperate.

4.1 Bulb Change – Promotion of Compact Fluorescent Lamp (CFL)

Project scheme

Lighting causes between 10 % and 20 % of the electricity bill of private households. CFLs have become

- technically better
- more attractive and
- much cheaper compared to former times.

Nevertheless private households react slowly as a result of old prejudices. According to EU's plan to ban incandescent lamps it is a good time to promote CFL. Different stakeholders can be integrated in the project by the coordinator such as manufacturers, retailers and the federal administration. The action will be co-ordinated by the Saxon Energy Agency (SAENA). The Federal Minister for Environment and one Saxonian manufacturer of CFL (Narva) already approved the project idea. First talks to a retailer group have been carried out with positive results.

Picture 3: Compact fluorescent lamp

Activities

5,000 conventional light bulbs will be changed by CFLs at a nominal fee of two Euros per CFL. The sell will be located at the site of building supplies stores in special events by staff members of SAENA. The manufacturer is willing to sell the lamps at low prices. The remaining costs will be covered by the nominal fee and a own contribution of SAENA. The federal state government will support these activities. The grant scheme has to be approved by all parties (SAENA, government, manufacturer, retailer). The negotiations have already started. The project refers to one focus of the action plan climate and energy 2008.

A media campaign with newspaper articles, radio spots and web presence will be launched. Flyers, posters and a brochure regarding efficient lightning in households are foreseen.

At the market site free energy advice by advisors of SAENA will be offered. Advice on energy efficiency and renewables is suggested. The action will be linked to the Saxon electricity efficiency campaign 'STROMSPARtakiade', giving the possibility to lower the domestic consumption, and to new regulations by the European directive on energy using products.

Time schedule and budget

The preparations of the action have already started. The realization is planned for March 2009. A budget of 30.000 € is estimated for the whole process.

Monitoring and expected results

The energy saving achieved can be calculated by the number of sold CFL and the average operation time (it has to be taken into account that at first lighting point with long operation times will be up lamped). A time of 700 to 1000 hours per year is estimated which can be verified by interviews.

If 5,000 CFL can be sold (with an expected lifetime of 10,000 hours) 2,500 MWh electricity can be saved. This means a reduction of 2,500 tons of CO_2. That can be related to the economic saving potential in private households of 100,000 MWh downscaled for Saxony from the national efficiency plan of the Federal Ministry for Environment (BMU) – reachable till 2020.

Beside the direct impact of the action the events will promote climate protection and energy saving in general.

The above drafted activity fits well either to the national allocation plan or to the federal climate action plan. If only two bulbs can be changed in the reached households, a reduction of the electricity for lighting of 20% can be amounted.

4.2. Sectoral Energy Concept – Agriculture

Project scheme

Up to the beginning of the project EL-EFF Region agriculture was not mentioned in the climate protection strategy of the federal administration. The administration and the representatives of the farmers applied for this change. This process is supported by the development of renewables in rural areas by the farmers supported by national and federal state government. Energy has become a topic for farmers since biogas and photovoltaic systems deliver substantial incomes. This risen awareness can be oriented towards the implementation of energy saving projects. The project refers to one focus of the action plan climate and energy 2008.

The EL-EFF Region project generated electricity benchmarks for several classes of animal farms. These benchmarks will be specified by the sectoral concept. The influence of the capacity of the farms on the benchmarks will be examined by case studies. Also the influence of different used techniques will be shown.

The University for Technology and Economy (HTW) in Dresden is interested in cooperating in this process. The energy agency SAENA will be the co-ordinator of such a project.

The results will be disseminated by SAENA in cooperation with stakeholders of the agricultural sector – details will be defined within the further development of the project. The Saxon farmer association will be integrated at least in that field. The

University for Technology and Economy is willing to cooperate in the scientific field. Possibly students in the field of agriculture will be involved due master thesis to make field studies.

Picture 4: Sustainable agriculture as a part of landscape

Activities

At the beginning case studies are required either to find more detailed benchmarks or to find promising saving potentials. It should be tried to establish some kind of consumption control on the covered farms. Agricultural energy experts or a university institute shall do this. The results have to be documented.

The results shall be discussed with experts. The revised knowledge shall be documented in presentations, flyers and brochures. It should be spread in workshops. A guidebook on energy saving will be prepared as final point.

Time schedule and budget

First talks to get responses of stakeholders have been made. The implementation is planned for 2009 and 2010. The estimated budget for the project is 40.000 €.

Monitoring and expected results

The possible savings will be estimated in the field studies. These results can be scaled up. For the scale-up the realization of potentials of the first studies can be used.

An energy saving rate of 10% within two years of consumption control and low investment measures could be reached on the covered farms.
If 10% of the farms can be reached on the long term and they score the above-mentioned reduction it means a decrease of about 1,800 MWh electricity per year and a diminishing of 1,800 tons of CO_2 per year.
The downscaled saving potential for Saxony by improvement of efficiency of ventilation, pumps and lighting in the third sector is 900 GWh in 2020 according the national efficiency plan of BMU.

4.3 There's a light – Optimising Municipal Lighting

Project scheme

In Germany 10 % of the total electricity is needed for outdoor lighting. It induces costs of 760 million € per year. For the federal state of Saxony costs can be estimated by 30 million € per year. Most of the money needs to be paid by municipalities.
The often-used mercury vapour lamps are expected to be banned by 2011. LED lamps will be introduced into the market. Currently, however, municipal lighting systems are often old and inefficient.
Street lighting (and its maintenance) has become a big topic for villages and towns. There is a national awareness campaign "Road Show Municipal Lighting". The tour bus with an exhibition stopped last summer in Dresden and was visited by the federal "Minister of Economy and Labour".
In pilot projects in Southern Germany savings of 35% could have been realized (www.zvei.org/kommunale_beleuchtung).
A long-term saving potential of 50 % is expected (www.emk.tu-darmstadt.de).

For the project municipalities will be chosen as the main target group because they are role models for private households and companies such as farms.

Centre of the project will be the development respective publishing of a guidebook on street lighting. The most promising technologies will be realized in a pilot action.

Activities

By desktop research and interviews with stakeholders key technologies have to be identified and described. Benchmarks have to be generated (by lighting experts and members of local administration) and published in articles, flyers and a brochure. Results will be disseminated in a workshop. It fits in the framework of the "Kommunaler Energiedialog Sachsen". Lighting experts and a PR agency will be involved. The project will be coordinated by SAENA.

In a second phase the results of the first phase will be implemented with the help of lighting experts. The design of the new system should be financed by the federal administration. The manufacturers will be involved into the actions of the project. Finally the results of the realization will be upscaled to federal level.

Picture 5: Efficient sodium lamp

Time schedule and budget

The project will be implemented in 2009 and 2010. The estimated budget is 50.000 €.

Monitoring and expected results

The national allocation plan expects 7.5 PJ of delivered energy to be reduced by optimised street lighting in Germany – about 0.375 PJ in the federal state of Saxony. One third of that can be reached till 2010. The total is a bit more than 5.5 % of the street lighting. The numbers above show that the technical potential is much higher. A reduction of 5.5 % until 2016 is a realistic goal. In the pilot project the reduction will be substantially higher (30 – 50%).

In the frame of the “Kommunaler Energiedialog Sachsen”, an initiative of the Saxon Energy Agency SAENA for a sustainable energy supply in municipalities in Saxony, the project results will be spread and possible follow up projects will be identified..

5 Targets

The German NEEAP II from November 2007 proclaims a reduction of delivered energy use of 9% in 9 years. The economic saving potential for the electricity sector is relatively high – on the other hand legislative action in this field is difficult.

In January 2009 the “Roadmap energy policy” of the National Minister for environment (BMU) defines ways to energy saving and sectors to reach the aims. In this roadmap an electricity reduction of 1% per year is announced. It takes into account that in the last years increases of the electricity consumptions were found. The Saxon Government stated in March 2009 the support of the national climate protection strategy.
So the aim of the action plan is a **future reduction rate of 1 % per year - an ambitious but realistic goal.**
In the period of the first “Climate Protection Plan” in Saxony” a reduction of about 8% of the CO_2-Emissions could be reached in Saxony within 5 years. With the new climate protection goals of March 2009 a CO_2-reduction in ‘no-emission trade sector’ of 26% in 14 years, which means about 17 % in 9 years if you assume a linear development, is foreseen.

Detailed aims of Saxony for the efficiency in certain sectors or technologies are not planned. An aim for the reduction of electricity in private households was discussed but rejected. It was argued that rising mobility by electro cars would lead to rising consumptions of private households.

Two of the three suggested actions deal with lighting. The saving potential in this field is well above average. A study for the national “Ministry for Economy and Technology” (Energieeinsparung und Energieeffizienz im Lichte aktueller Preisentwicklungen by Prognos AG, 2006) found out, that 85 % of the technical potential is economically profitable. In Saxony an annual reduction of 160 Million Euro und 600,000 tonnes CO_2 is expected by the use of electricity efficient lightning in households, industry and municipalities.

The third project addresses the agricultural sector. Within the dissemination activities of the project EL-EFF Region a growing interest in the issue of electricity saving in farms has been determined. Farmers and farmer association have growing awareness of the positive effects of efficiency measures. Hence more detailed benchmarks and follow up projects are requested. The introduced project shall provide more detailed benchmarks and ensure a scientific confirmed basis for further activities. In combination with the foreseen public relation activities the project will provide long term savings in the agricultural sector.

6 Implementation and monitoring

In the framework of the National Allocation Plan a regional allocation plan will be launched. First talks about that are beginning now. A monitoring system for that will be launched and should be used for the above-mentioned projects.

On the strategic level the monitoring and implementation will be controlled by the department of climate protection in the “Ministry for Environment and Agriculture (SMUL)”. The ministry is commissioned to report the state of implementation of the “Climate Protection Plan” once per election period.

On the operational level the activities will be controlled, executed and monitored by SAENA.

The experts of the projects should do the monitoring of the suggested actions. The way of monitoring is described above.

These processes will lead to a systematic implementation of energy saving activities.

Annex 1

Interviewed Stakeholders

Institution	Prename	Surname	Stakeholder group/function
Verbraucherzentrale Sachsen	Roland	Pause	Energy adviser
Handelsverband Sachsen e.V., Fachgem. Technik	Gunter	Engelmann-Merkel	Representative of retailers
SATURN	Monika	Menndorf	Retailer
Envia Mitteldeutsche Energie AG	Haiko	Fritzsch	Supplier
Envia Mitteldeutsche Energie AG	Norman	Lein	Supplier
ENSO Energie Sachsen Ost GmbH	Birgit	Dr. Wetzel	Supplier
Stadtwerke Leipzig GmbH	Karsten	Wagner	Supplier
Stadtwerke Leipzig GmbH	Winfried	Bremer	Supplier
DREWAG Stadtwerke Dresden GmbH	Frank	Tredetzky	Supplier
Stadtwerke Chemnitz AG	Dr. JŸrgen	Koppe	Supplier
Stadtwerke Schneeberg	Gunar	Friedrich	Supplier
Staatsministerium fŸr Wirtschaft und Arbeit	Hartmut	Gorski	Federal government
Staatsbetrieb SŠchsisches Immobilien- und Baumanagement	Niels	Schwarzer	Federal government
SŠchsischer Landesbauernverband e.V.	Ilse	Mohr	Energy adviser
SŠchsischer Landesbauernverband e.V.	Manfred	Uhlemann	Representative of farmers
Verband der privaten Landwirte im Nebenberuf (VNL)	Matthias	Schreier	Representative of farmers
Verband der privaten Landwirte und GrundeigentŸmer (	Dieter	Tanneberger	Representative of farmers
Landesverband Gartenbau Sachsen e.V.	Eberhard	Haag	Representative of farmers
G€A	Ulf	Mueller	Representative of farmers
SŠchsische Landesanstalt fŸr Landwirtschaft	Thomas	Heidenreich	Federal government/ research

List of invited Stakeholders

Round table private households

Verbraucherzentrale Sachsen e.V. Herr Roland Pause Brühl 34-38 04109 Leipzig
Handelsverband Sachsen e.V. Fachgemeinschaft Technik Herr Gunter Engelmann-Merkel Geschäftsführer Westsachsen Täubchenweg 8 04317 Leipzig

Saturn Elektro-Handelsgesellschaft mbH Dresden-Reick Betriebsstätte ECE Frau Monika Menndorf Geschäftsführerin Webergeasse 1 01067 Dresden
DREWAG Stadtwerke Dresden GmbH Herr Frank Tredetzky Unternehmensentwicklung Rosenstraße 32 01067 Dresden
Stadtwerke Schneeberg Herr Gunar Friedrich Geschäftsführer Joseph-Haydn-Str. 5 08289 Schneeberg
Lokale Agenda 21 für Dresden e.V. -Energiestammtisch- Herr Edwin Seifert Palaisplatz 2b 01097 Dresden
Klimaschutz-Agentur Görlitz-Zgorzelec Herr Harald Fieber Fischmarkt 11 02826 Görlitz
Sächsische Energieagentur GmbH Frau Denise Pielniok Bereich Zukunftsfähige Energieversorgung Pirnaische Straße 9 01069 Dresden
Sächsisches Landesamt für Umwelt und Geologie Herr Andreas Völlings Referat 21 (Integrativer Umweltschutz) Postfach 800132 01101 Dresden
Firma GERTEC GmbH Herr Andreas Hübner Geschäftsbereich Energiekonzepte und Beratung Schlüterstr. 29 01277 Dresden
Firma GERTEC GmbH Herr Jörg Ackermann Geschäftsbereich Energiekonzepte und Beratung Schlüterstr. 29 01277 Dresden

Round table agriculture

ENSO Energie Sachsen Ost GmbH Frau Dr. Birgit Wetzel Unternehmenskommunikation Friedrich-List-Platz 2 01069 Dresden
Sächsischer Landesbauernverband e.V. Frau Ilse Mohr Energieberatung Wolfshügelstraße 22 01324 Dresden
Sächsischer Landesbauernverband e.V. Herr Manfred Uhlemann Stellv. Hauptgeschäftsführer Wolfshügelstraße 22 01324 Dresden
Verband der privaten Landwirte im Nebenberuf (VNL) Herr Matthias Schreier Vorsitzender Hinterdorfer Straße 3 08340 Beierfeld - Waschleithe
Verband der privaten Landwirte und Grundeigentümer (VDL) Herr Dieter Tannenberger Geschäftsführer Dresdner Straße 46 09526 Dittmannsdorf
Landesverband Gartenbau Sachsen e.V. Herr Eberhard Haag Vorsitzender Scharfenberger Straße 67 01067 Dresden
Gäa e.V. – Ökologischer Landbau Herr Ulf Mueller Am Beutlerpark 2 01217 Dresden
Sächsiche Energieagentur GmbH Frau Denise Pielniok Bereich Zukunftsfähige Energieversorgung Pirnaische Straße 9 01069 Dresden
Sächsische Landesanstalt Für Landwirtschaft (SLL) Herr Thomas Heidenreich Fachbereich 3 (Agrarökonomie, Ländlicher Raum) Leipzieger Straße 200

04178 Leipzig
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EL-EFF Regions
WP 3: Regional Action Plan "List of measures"
Region: Saxony

Project Partner: Gertec/SAENA
Sector: Private Households

No	Measure	Main actors	Description of the measure	Targeted / expected impact	Years of implementation (estimated)	Funding body	Estimated costs
1	Grants for energy saving technologies	GERTEC/ SAENA	Campaign on energy saving refrigerators, pumps and lamps	*1,500 MWh*	2010 - 2012	Regional govern-ment/SAENA	500,000
2	Awareness campaign on energy saving	SAENA	Target group specific campaign with online information platform, brochures and events, information and public relation at regional fairs and in press	*1 % of the households participate, 200 kWh/a per household saved*	2008 - 2010	SAENA	300,000
3	Electricity efficiency in low income households	eaD, Caritas, regional partner	Reduction of electricity consumption in low income households by information and providing an electricity	long term savings, electricity cost	2008 - 2009	Federal government	40,000

		SAENA,	saving package; training of electricity saving assistance and on site consulting in households	savings of 100€ per households and year			
4	Generation of benchmarks by lottery	SAENA	Incentives to make people enter consumption data	long term savings	2008 - 2010	SAENA	40,000
5	Generation of success criteria for energy saving households	SAENA	Identification and communication of success criteria / best practice; information and public relation with online information platform, in press	long term savings	2009	SAENA	10,000

Sector: Public bodies (municipalities)

No	Measure	Main actors	Description of the measure	Targeted / expected impact	Years of implementation (estimated)	Funding body	Estimated costs
1	Electricity efficient lighting in municipalities	SAENA	Showing best practice by model projects; information and public relation with online information platform, brochure, events, in press	20 – 25% within 12 years	2009 - 2011	SAENA	50,000
2	Environment friendly	SAENA	Development of a guideline for energy efficient	1% per year for 5	2009 - 2011	SAENA	50,000

	procurement		procurement in municipalities; information and public relation with online information platform, brochure, events, in press; implementation in administrative regulation	years			

Sector: Agriculture

No	Measure	Main actors	Description of the measure	Targeted / expected impact	Years of implemen-tation (estimated)	Funding body	Estimated costs
1	Branch energy concept	GERTEC/ SAENA	Case studies and deduction of benchmarks, technologies with saving potential, meeting of stakeholders, brochure	10% saving in covered farms	2010 - 2011	Regional government	75,000
2	Internet tool on consumption check	GERTEC	Benchmarks and calculation of details	Long term savings	2012	Regional government	50,000
3	Best practice	GERTEC	Best practice brochure and Internet-Presentation	Long term savings	2012	Regional government	30,000