# Strategic Regional Management Plan

## County of North West Mecklenburg

**Grevesmühlen**
**November 2009 – December 2011**

Landkreis Nordwestmecklenburg/ County of North West Mecklenburg
Administrative section for business- and regional development

Yvonne Rowoldt

Börzower Weg 3
Telefon 03881/ 722 222
Telefax 03881/ 722 9 222
Email y.rowoldt@nordwestmecklenburg.de

Web www.nordwestmecklenburg.de

**Index**

Strategic Regional Management Plan County of North West Mecklenburg ..... 1
1 Preamble ..... 4
1.1 Description of the region ..... 4
1.2 Intersection to the regional network point ..... 5
1.3 Aims of strategic regional strategic management plan for the County of North West Mecklenburg ..... 6
2 Proceedings for the Strategic Regional Management Plan (SRMP) ..... 8
2.1 Define a working group ..... 8
2.2 Define a workflow as a part (proofing of ) of the SRMP ..... 8
2.3 Define the scope of SRMP, aims and milestones ..... 9
2.3.1 Scope of the SRMP ..... 9
2.3.2 Aims of the SRMP ..... 9
2.3.3 Milestones to the SRMP ..... 10
2.3.4 Task to implement the SRMP ..... 11
3 Structure of SRMP ..... 14
4 Index ..... 19
4.1 Figures ..... 19
4.2 Tables ..... 19
5 Appendix ..... 20

# 1 Preamble

## *1.1 Description of the region*

The County of North West Mecklenburg is situated in the north of Germany. It's consisting of 90 municipalities on an area of 2,117 km² with 160,423 inhabitants (76 inhabitants/km²) and district town Wismar. Predominant is rural area with 57 inhabitants/km² in little villages between nearly 200 up to 1,000 inhabitants. But only 2.8 % working in agricultural-, forest-, and fishing business and 10.7 % are jobless. Working in the operational field of renewable energies is one step to bring new perspectives in the rural area. With the EU-Project "Bioenergy Promotion" the region will use the chances of biomass and set up a conception for regional administration to promote renewable energies, to support the target of the German government by their energy turnaround.

**Figure 1 North West Mecklenburg in Germany**

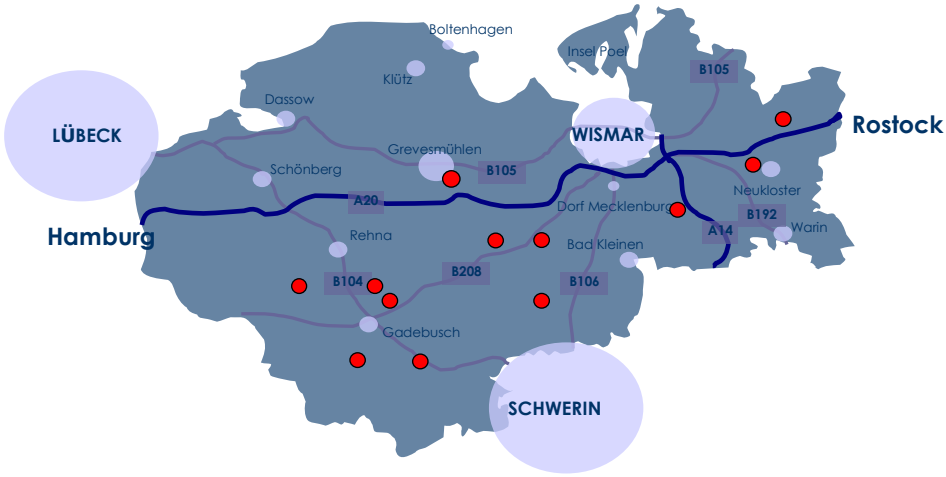



**Figure 2 North West Mecklenburg with biogas plants**

Due to the usage of land use, during the EU-Project "Bioenergy Promotion" focusing on biomass from agricultural area and concentrate the working group and project to problems and possible solutions in this sector. So analysis and strategic management plan are even concentrating in biomass from agricultural area.

**Table 1 Type of land use in the County of North West Mecklenburg**

| **Usage** | **County of North West Mecklenburg [ha]** | **Proportion [%]** |
|---|---|---|
| forest area | 27,152 | 13 |
| agricultural area:<br>thereof cropland | (152,328)<br>126,039 | (74)<br>61 |
| grassland area | 16,487 | 8 |
| area for settlement and transportation | 14,992 | 7.5 |
| water area | 8,.902 | 4.5 |
| total: | 207,578 | 100 |

Source: www.statistik-mv.de

Table 1 shows that the main BE Sector is in agriculture. Today still 12 biogas plants are working. The potential analysis describes that with a view on energy corps and manure a realistic sustainable assumption are 20 new biogas plants for North West Mecklenburg.

## *1.2 Intersection to the regional network point*

Due to the EEG-Law the establishing of biogas plants was rapid and unplanned. So in this sector there are a lot of different stakeholders with different interests and perhaps different problems. The start of the EU-project "Bioenergy Promotion" was used to identify the stakeholders and established a working group. This group did make proposals for the next steps and the content of the strategic management plan.

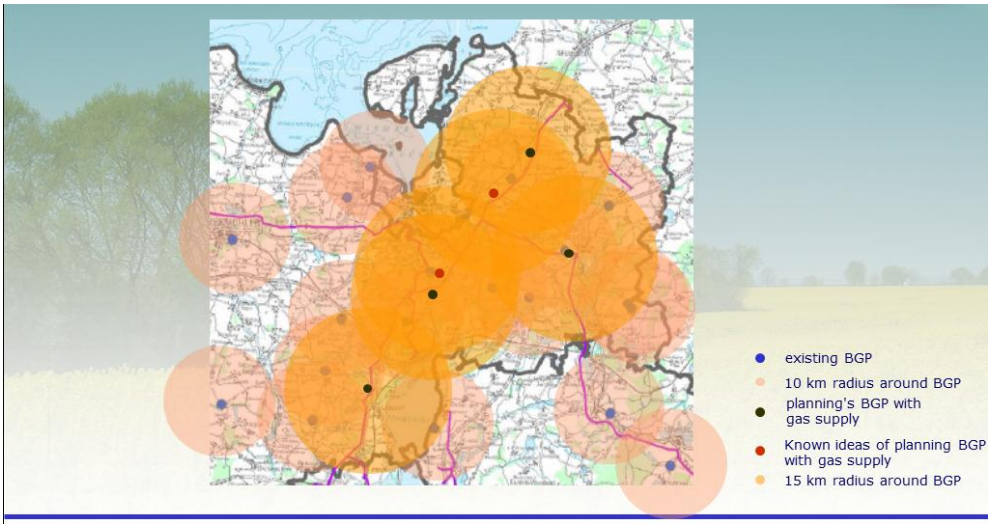



**Figure 3 Existing and planned biogas plants in NWM**

# 1.3 Aims of strategic regional strategic management plan for the County of North West Mecklenburg

According to the results of the working group (see 1.2 Intersection to the regional network point) we lay the focus on municipalities and the future of rural living. In contrast of living in a city with short distances between living and working, higher building density and the easier availability of energy, the rural living more depends on the prices of energy (for mobility, heating etcetera)

Main factors are:

- demographical development -> elderly people -> mobility costs = energy costs
- unemployment rate -> low income -> heating costs = energy costs
- level of reconstructed buildings -> energy efficiency -> saving of energy costs

We aim to use the renewable energies to start processes in rural area of County of North West Mecklenburg.

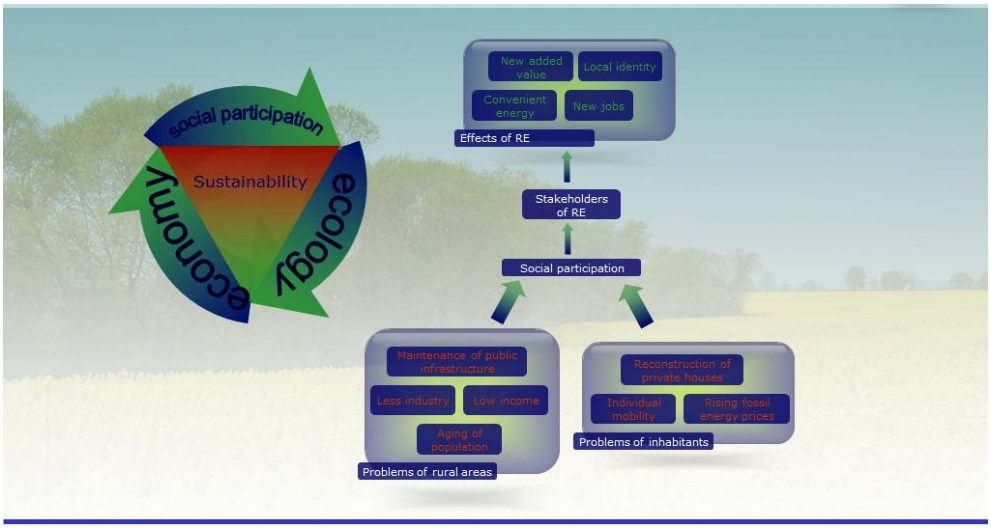



**Figure 4 Influences of Renewable Energy in social participation**

With the project "Bioenergiedörfer MV" ((Bio)Energy Villages of Mecklenburg- West Pomerania) we work on these factors or on the impact of these, respectively. Main goal is the social participation of the citizen on local biogas plants, biomass heating plants, local heating networks. With the saving costs should build up regional value chains.

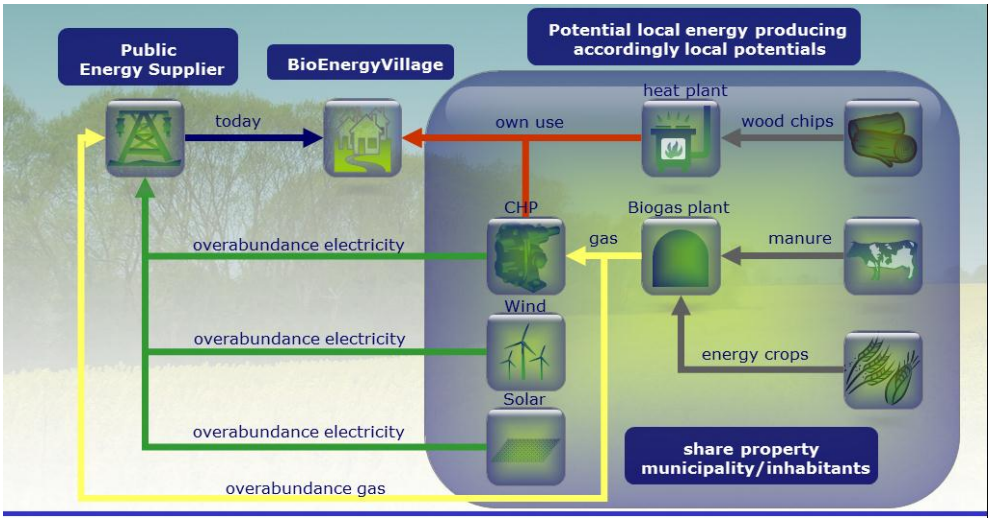



**Figure 5 Idea of the (Bio)Energy Villages MV**

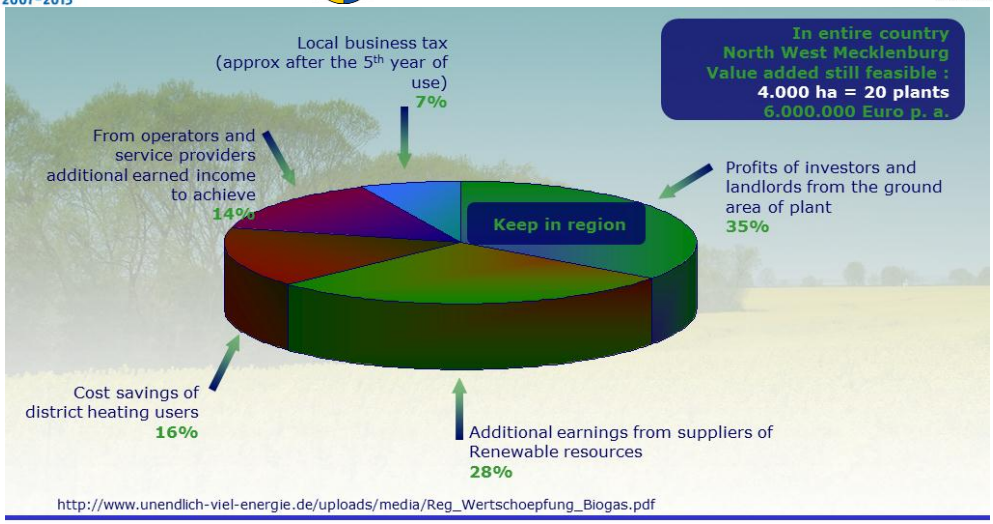



**Figure 6 Distribution of value added by biogas plants**

For the energy sector we analyse regional value chains. Which general regulations (EU, Germany laws) and regional conditions are to consider in order to build up these chains? Our finding will give a guideline for municipalities, producers and consumers to use bioenergy.

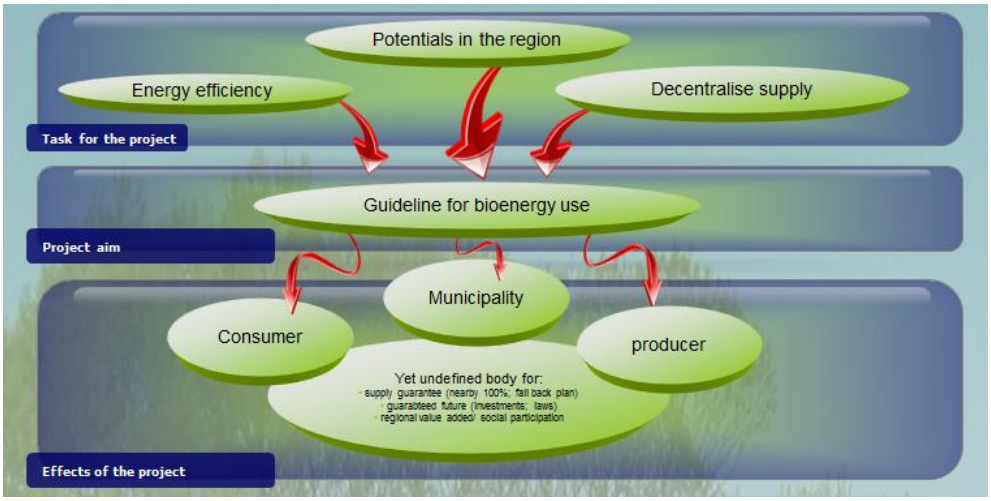



**Figure 7 Idea for the SRMP**

# 2 Proceedings for the Strategic Regional Management Plan (SRMP)

## *2.1 Setting up working group*

To build a working group identifying of stakeholders for bioenergy in the region is necessary.

Considering following groups of

- the official organisation of farmers in the region "Kreisbauernverband Nordwestmecklenburg"
  - farmers as supplier of renewable resources
  - farmers as producer of bioenergy (electricity and heat) in a Biogas Plant
- regional industrial sector of energy
  - municipal energy supplier (Stadtwerke Grevesmühlen, Stadtwerke Schwerin)
  - network operator (WEMAG)
- users of bioenergy
  - local residents (electricity and heat)
  - municipalities (local buildings)
- engineers for bioenergy equipment (biogas plants, district heating networks, woodchip heating systems)
- regional government
  - mayors, municipal councils
  - regional building and planning authority
  - ministries of agriculture and of economics of the federal state Mecklenburg-Vorpommern

## *2.2 Setting up workflow as a part (proofing of) of the SRMP*

Collect information (potentials, see Task 4.2, existing business, see Task 4.4) and provide them (networkpoint, webpage, events)

Organising events, like:

- workshops for mayors and local authorities
- lectures for municipal councils
- conferences for stakeholders in the region
- meetings to exchange experiences for villages on the way to (Bio)Energy Villages
- road shows for the local residents

In Appendix questionnaire and example lectures are enclosed. (see Appendix I Questionnaire for the Workshop for mayors and regional authorities in County of North West Mecklenburg)

During the EU-Project and the working on the SRMP the County of North West Mecklenburg became a local part of the federal state project "Coaching (Bio)energiedörfer MV" (Bio)Energy Villages. So a part of SRMP is to spread information about the project, participation and organisation events from (Bio)Energy Villages and provide presentation and information about Bioenergy in municipal councils, events from local/regional partners.

**Figure 8 Working group, workshop, event, road show, exchange-meeting**

## *2.3 Define the scope of SRMP, aims and milestones*

### 2.3.1 Scope of the SRMP

Examine the region of the County of North West Mecklenburg (see Task 4.1) and analysis the biomass potentials (see Task 4.2).

Connect the regional stakeholders (see Task 4.3). Establish and keep contact to regional planners, regional engineers, regional energy suppliers, regional building and planning authority, regional farmers, regional municipalities, and regional financiers. Which these stakeholders a working group was built. To bring external input, this group was connected to the "regional energy MV" network.

Avoid processes like the early establishing of wind power before "areas for wind power" were created by spatial planning and like now, where these areas shall be exceeded due to the energy turnaround of the German government. There faster project developer occupied best places, by selling money for further deals. So we have to bring information to municipalities and public to avoid locked areas in contracts without any facts (technical data about wind turbines).

### 2.3.2 Aims of the SRMP

As a regional authority we cannot set up plans into a municipality, we only can point on the potentials and coach on the way to "(Bio)Energy Villages", thus we want to do with the guideline by considering regional conditions. We set up a framework (**plan**) for our future task/aims, describing the tasks and aims (**strategic**) and pointing out how we can solve the task (how can we financing the planning), reaching the aims (**management**) in our region.

As an example for a task: We want to use the sustainability criteria from Task 3.1 and the potential analysis from Task 4.2 to define suitable locations for biogas plants with supply to the natural gas grid according to the requirements of municipalities (land use, planning authority, participation) financing by C02-certification.

### 2.3.3 Milestones to the SRMP

At first, we defined a region (analysis of potentials, connect to regional energy network, built working group, develop projects for region) for project scope.

Proceeding the process with EU-project **RES-Chains**, where the project partners are identifying chains of renewable energy sources, added value chains and chains by mix of renewable energies.

In 2012 County of North West Mecklenburg will become twin region to a **bioenergy region**. This is a second stage of a project by Federal Ministry of Food, Agriculture and Consumer Protection. In 2009 a competition brings 25 regions to a bioenergy region. County of North West Mecklenburg was involved the competition, but fails to become a bioenergy region. In these regions functional networks should be established and policies should set up to using the potentials of biomass for regional added value. Focus is on sustainable producing/using with establishing of new jobs in regions.

After a decision of the county council an application to the **100ee-Region**, to build up the region to an area with 100% energy from renewable energy, produced in the area itself. This project is established by Federal Ministry for the Environment, Nature Conservation and Nuclear Safety of Germany to connect climate protection, regional development and renewable energies, aims are environmental and climate protection, guaranteed supply, regional added value, social participation and financial public participation.

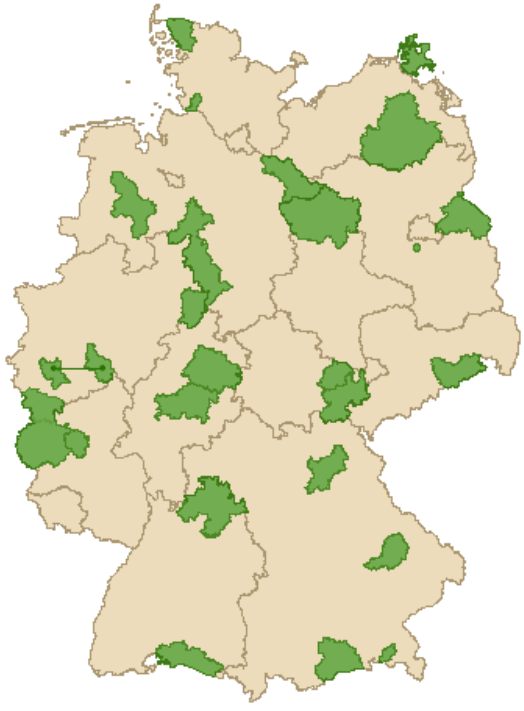


**Figure 9 Bioenergy-Regions in German-wide Project**

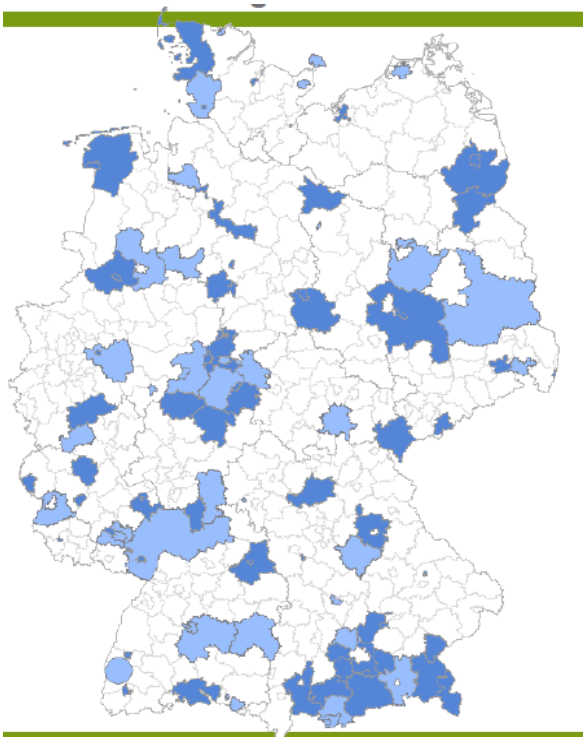


**Figure 10 100ee-Regions in German-wide Project**

### 2.3.4 Task to implement the SRMP

The projects in the SRMP are structured in following operational parts into the field „renewable energy" in the administration of the county:

- little villages in rural area (bringing on the way to become (Bio)Energy Villages)


**Figure 11 Municipalities how want to become a (Bio)Energie Villages and one existing (Bio)Energy Village Stellshagen**

- workshops with local authorities and mayors
- lectures, presentations in municipalities councils and events, road shows to bring information into public
- meetings with engineers and regional public supplier to force the process for the (Bio)Energy Villages
  - as one result a matrix of project steps and the considering parameter was created; the lowest row is covered by "coaching BED", the project in Mecklenburg-West Pomerania
  - as a consensus the (pre-)financing of the next step (middle row) with an approval planning of grids or plants and not yet established business organisation (limited company or cooperative society) seems to be the hardest step

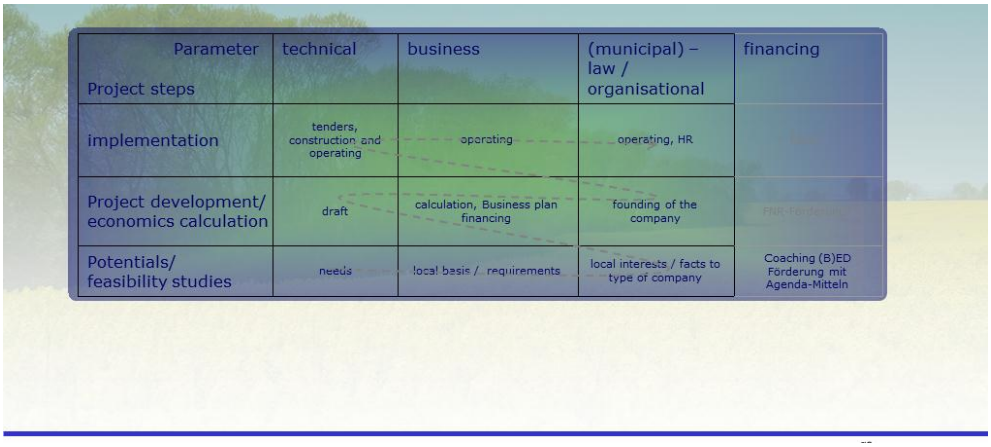



**Figure 12 Matrix for Project (Bio)Energy Villages in NWM**

- survey of requirements for county to participate in a holding with local and regional public supplier to professionalise the development of bioenergy projects with public participation (current in progress)
- proofing of business cases of this association for technical or commercial services for (Bio)Energy Villages

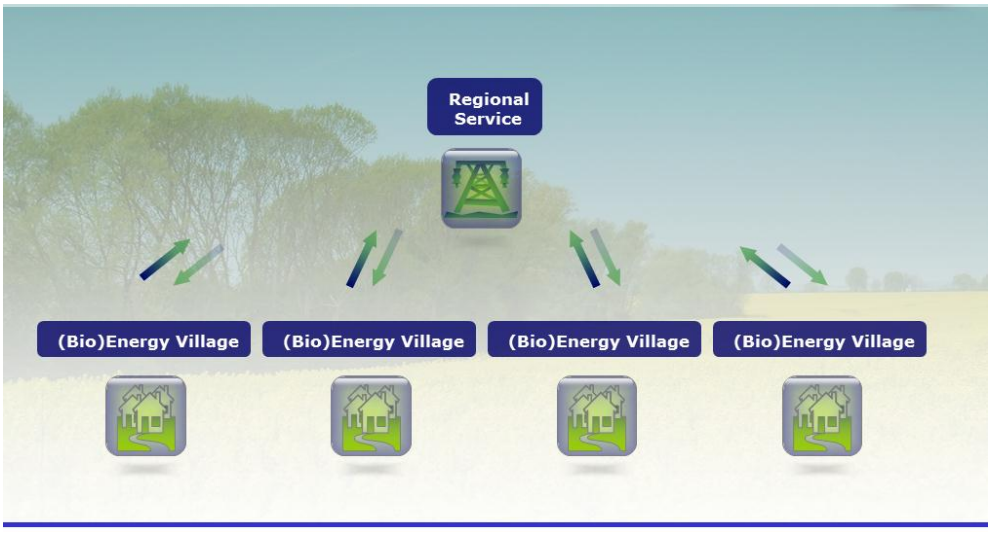



**Figure 13 Regional Service Organisation for (Bio)Energy Villages**

- in 2012 there will be an examination of a pilot in Upahl, due to the property of the counties company as one part of a project

- rural little towns
  - without own public supplier, but often with commercial or industrial estates (potentially suitable for bioenergy plants)
  - often with local heating grids, owned indirectly by municipalities (via regional association of communes)
  - often local authority (management know-how) location
- new housing estates/residential areas
  - development of contracting/ energy managements
  - from plus-energy-houses to plus-energy-estates
    - in 2012 new residential area Selmsdorf as sustainable lighthouse project
- unused industrial estates transform into energy parks
- own properties of county (public buildings)
  - administrational buildings
  - school buildings
  - properties for supporting organisations (like emergency management)
    - like "GTZ NWM" in Warin -> Idea: biomass yard

Furthermore projects should feature links to the remaining operational fields for sustainable business and regional development with regional added value:

- Food production and industry
- Health care management industry
- tourism management and industry -> Idea: Sustainable Green Region Klützer Winkel
- mobility -> project InMOD

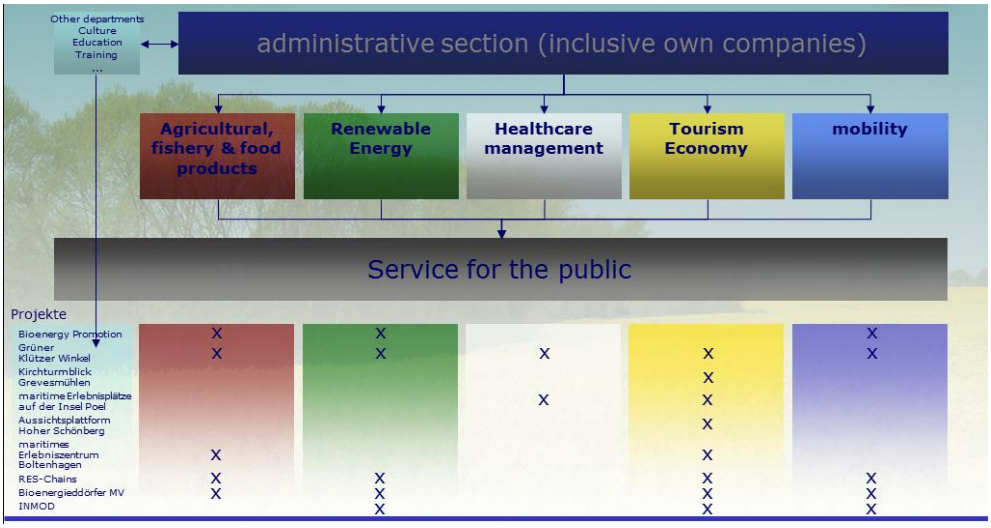



**Figure 14 Operational fields for County of North West Mecklenburg**

# 3 Structure of SRMP

In task 4.6 it was set up a framework to describe the future tasks to manage by external experts from "Umweltplan Güstrow". The structure pointed out the tasks, with tasks are possible to do for administration of County of North West Mecklenburg and with task have to check by the administration, partly with external partner. These should become legally binding by a decision of the county council.

**Table 2 Framework SRMP**

| Content | Processing with existing data | Analysis or consolidation necessary |
|---|---|---|
| **A principle, potential analysis, aims, strategies** | | |
| **A.1 principle for energy in administrative district**<br>100 %-region up to 20xx | | |
| **A.2 Potentials for implements principle** | | |
| A.2.1 Potentials, existing plants<br>– biogas<br>– biomass<br>– biofuels<br>– photovoltaic<br>– solar heat<br>– wind energy<br>– energy from water<br>– geothermal energy<br>– heating plants, CHP | | external experts |
| A.2.2 Potentials existing grids electrical power/gas | | public supplier |
| A.2.3 Potential analysis landscape/ biomass | partial planning (landscape | external experts |

| Content | Processing with existing data | Analysis or consolidation necessary |
|---|---|---|
| – structural infrastructure in open areas [products of landscape conservation]<br>– partition of structures for use (relation cropland/ grassland/forest) [biomass from forest or agricultural areas]<br>– Potentials from utilisation of residue/waste | framework plan, land register) | |
| **A.3 comparison energy demand/potentials and derivation of targets** | | |
| A.3.1 comparison determined value energy demand (from Part E) vs. potentials of renewable energies | derivation | |
| A.3.1 identification of potentials for energy efficiency (electrical power, heat) [modifying of demands; focus public buildings] | | ??? |
| A.3.2 conclusion from comparison | derivation | |
| A.3.3 targets to implement principle | derivation | |
| **B implementation** | | |
| **B.1 strategy for implementation** | | |
| B.1.1 coaching and consulting | | |
| B.1.2 network and partnership with stakeholders in renewable energy sector | | |
| B.1.3 coordination of regional project (between municipalities) | | |
| B.1.4 development of progressive ideas for projects (e.g. participation in project for climate change/ mitigation or Renewables federal/ national) | | |
| B.1.5 pilots or models for implementation | | |
| B.1.6 Communication and Public Work | | |
| B.1.7 opportunities for qualification | | |
| **B.2 guidebook for evaluation of projects and activities** | | |

| Content | Processing with existing data | Analysis or consolidation necessary |
|---|---|---|
| checklist with criteria for evaluation<br>– location in NWM<br>– relation to principle (100 %-Region)<br>– social part of sustainability (participation, self-supply)<br>– ecological part of sustainability<br>– economical part of sustainability<br>– …<br>– … | | |
| **C volume of projects** | | |
| Compilation of active and planned projects with evaluation and prioritisation | | |
| **D public abstract (where appropriate as discrete brochure)** | | |
| D.1 German abstract | | |
| D.2 Summary | | |

| Content | Processing with existing data | Analysis or consolidation necessary |
|---|---|---|
| **E Appendix/ Volume of material: general requirements and analysis** | | |
| **E.1 general requirements** | | |
| E.1.1 higher level aims to promote renewable energies<br>– EU, Germany, federal state Mecklenburg-Vorpommern | external partner and LK NWM | |
| E.1.2 socio-economics in Country of North West Mecklenburg<br>– demographic trend<br>– unemployment<br>– economic structure<br>– ... | statistical data LK NWM | |
| E.1.3 requirements of natural landscapes<br>– climate and climate change<br>– soil<br>– ... | statistical data, external partner, LK NWM (potential analysis ) | |
| E.1.4 requirements of infrastructure<br>– Transport infrastructure<br>– grids<br>– rurban (peri-urban)<br>– ... | statistical data, external partner, LK NWM (potential analysis ) | |
| E.1.5 cultivation structure<br>– agriculture<br>– forest | statistical data, external partner, LK NWM (potential analysis ) | |
| E.1.6 environmental requirements | External partner, LK NWM | |

| Content | Processing with existing data | Analysis or consolidation necessary |
|---|---|---|
| – Natura 2000<br>– conservation area<br>– ... | | |
| E.1.7 facility management | LK NWM | ?? |
| E.1.8 stakeholder/ organisational structure and previous activities in renewable energies | LK NWM | |
| **E.2 Analysis of current position** | | |
| E.2.1 actual consumption (derivation of demand ) | | |
| E.2.1.1 quantity of energy<br>– depending on energy source (oil, gas, coal, wind, solar, biomass, …)<br>– depending on users (private households, companies, farmers, public authorities, ...)<br>– forms of energy (heat, electrical power, transport fuels) | | regional supplier (WEMAG, EON) |
| E.2.1.2 high demand area | | regional supplier (WEMAG, EON) |
| E.2.2 actual production<br>– energy production plants in County of North West Mecklenburg<br>– energy production plants in NWM, with are using renewable energies<br>– share of renewable energies by electrical power, by hear<br>– volume of sales with renewable energies | | regional supplier (WEMAG, EON) |
| **E.3 financial budget** | derivation | |
| **E.4 details for monitoring and updating** | derivation | |

# 4 Index

## 4.1 Figures

Figure 1 North West Mecklenburg in Germany ..... 4
Figure 2 North West Mecklenburg with biogas plants ..... 4
Figure 3 Existing and planned biogas plants in NWM ..... 5
Figure 4 Influences of Renewable Energy in social participation ..... 6
Figure 5 Idea of the (Bio)Energy Villages MV ..... 6
Figure 6 Distribution of value added by biogas plants ..... 7
Figure 7 Idea for the SRMP ..... 7
Figure 8 Working group, workshop, event, road show, exchange-meeting ..... 9
Figure 9 Bioenergy-Regions in German-wide Project ..... 10
Figure 10 100ee-Regions in German-wide Project ..... 10
Figure 11 Municipalities how want to become a (Bio)Energie Villages and one existing (Bio)Energy Village Stellshagen ..... 11
Figure 12 Matrix for Project (Bio)Energy Villages in NWM ..... 11
Figure 13 Regional Service Organisation for (Bio)Energy Villages ..... 12
Figure 14 Operational fields for County of North West Mecklenburg ..... 13

## 4.2 Tables

Table 1 Type of land use in the County of North West Mecklenburg ..... 5
Table 2 Framework SRMP ..... 14

## 4.3 Appendix

I Questionnaire for the Workshop for mayors and regional authorities in County of North West Mecklenburg

II Questionnaire for the meeting of the villages with decision to become (Bio)Energy Village in NWM

III Poster (Bio)Energy Village Stellshagen

IV Poster of the bioenergy actions of Grevesmühlen

V Lecture/information for municipal council (here Damshagen)

# 5 Appendix

I. Questionnaire for the Workshop for mayors and regional authorities in County of North West Mecklenburg

Baltic Sea Region Programme 2007-2013
Landkreis Nordwestmecklenburg
County of North West Mecklenburg
Bioenergy Promotion

**Fragebogen Bioenergieregion Nordwestmecklenburg**
**Veranstaltung für Bürgermeister und Ämter**

Hat sich Ihre Gemeinde schon mit Erneuerbaren Energien beschäftigt? Nein ☐ Ja ☐

Wenn ja, mit welchen? .....

Hat Ihre Gemeinde einen Beschluss für Erneuerbare Energien gefasst? Nein ☐ Ja ☐

Wenn ja, welchen? .....

Hat Ihre Gemeinde Kontakre mit Investoren zum Thema Eneuerbare Energien aufgenommen? Nein ☐ Ja ☐

Wenn ja, welchen? .....

Haben Investoren Kontakt zur Gemeinde zum Ausbau der Erneuerbaren Energien aufgenommen? Nein ☐ Ja ☐

Wenn ja, welchen? .....

Hat sich Ihre Gemeinde mit dem Thema Nachhaltigkeit und Bürgerteilhabe beschäftigt? Nein ☐ Ja ☐

Wenn ja, mit welchen Ergebnissen? .....

.....

.....

.....

Hat ihre Gemeinde schon ein Bioenergie-Projekt gestartet? Nein ☐ Ja ☐

Wenn ja, mit welchen Ergebnissen? .....

.....

Ist die Gemeinde / Sind Sie bereit im regionalen Netzwerk „Bioenergie Nordwestmecklenburg" mit zu wirken? Nein ☐ Ja ☐

Wer sollte Ihrer Meinung nach noch am Netzwerk „Bioenergie Nordwestecklenburg" mit arbeiten?

.....

.....

.....

☐ Ich möchte mehr zum Thema „Bioenergie" erfahren und bitte ☐ um Kontaktaufnahme ☐ um Zusendung der Vorträge

Teilnehmer/in (bitte lesbar ausfüllen)

Name: .....

Gemeinde: .....

Adresse: .....

Email: .....

Telefon: ..... Fax: .....

eu.baltic.net

Part-financed by the European Union
(European Regional Development Fund and
European Neighbourhood and Partnership Instrument)

# II. Questionnaire for the meeting of the villages with decision to become (Bio)Energy Village in NWM

Baltic Sea Region Programme 2007-2013
Landkreis Nordwestmecklenburg
County of North West Mecklenburg
Bioenergy Promotion

## Fragebogen (Bio)energiedörfer Nordwestmecklenburg
## Erfahrungsaustausch Beschlussgemeinden

Hat Ihre Gemeinde die angebotenene Fördermöglichkeiten für eine Machbarkeitsstudie genutzt/angefragt? Nein ☐ Ja ☐

Wenn ja, welche? .....

Hat sich Ihre Gemeinde schon ein Ingenieurbüro für die Potenzialanalyse/Machbarkeitsstudie beauftragt? Nein ☐ Ja ☐

Wenn ja, welches? .....

Welche Bereiche der Energiegewinnung werden in der Machbarkeitsstudie geprüft?
Biogas ☐
Biomasse ☐
Photovoltaik ☐
Solarthermie ☐
Geothermie ☐

Welche Möglichkeiten zur Energieeffizenz werden in der Machbarkeitsstudie betrachtet?
Energetischer Zustand der Häuser ☐
Kurzfristige Maßnahmen bei bestehenden Anlagen (Heizungspumpe) ☐
LED-Straßenlaternen ☐

Hat sich Ihre Gemeinde schon eine Gruppe von Bürgern gefunden, die sich mit dem Thema Erneuerbare Energien im eigenen Dorf beschäftigt?
Nein ☐
Ja, aber bisher nur als BI dagegen ☐
Ja, als Arbeitsgruppe zur Umsetzung des (B)ED ☐

Hat ihre Gemeinde schon einen/mehrere Geldgeber zur Umsetzung, wenn ja, jemanden aus der Gemeinde oder ein externer Investor?
Nein ☐
Ja, intern ☐
Ja, extern ☐

Welche Schritte zur Umsetzung planen Sie und wann?
Einwohnerinfoversammlung ☐, .....
Machbarkeitsstudie ☐, .....
Gründung einer Arbeitsgruppe ☐, .....
Gespräche zur Förderung/Finanzierung ☐, .....
Umsetzung ☐, .....

Wobei können/sollen wir Sie unterstützen?

.....

.....

.....

Teilnehmer/in (bitte lesbar ausfüllen)

Name: .....

Gemeinde: .....

Adresse: .....

Email: .....

Telefon: ..... Fax: .....

eu.baltic.net

Part-financed by the European Union
(European Regional Development Fund and
European Neighbourhood and Partnership Instrument)

III. Poster (Bio)Energy Village Stellshagen


## Background and Objectives

In 2010 inhabitants and interested landlords built a central heating station, to supply their village with heat and warm water.
As a first step the cooperative "HWS HolzWärme Stellshagen eG" (wood heat Stellshagen) was founded in 2009 .
With a committed consultation and a credit by the GLS bank the project could be carried out like planned.
Due to heat production on basis of wood chips, supported by a thermal solar system and distribution via their own local heating net, the connected residents are supplied centrally with heat since November 2010.

In the 1st stage of development 14 customers get supplied with approx 2 000 m² of apartments and business premises.
Despite the high investments at the beginning, the long term calculation is profitable, shown by the reached parameters of power and the economically figures so far.

*Figure 1. Idea of biomass using in Stellshagen*

*Figure 2. Wood chip heating station with storage room (2010)*

## Results

***Chronological data***

| | |
|---|---|
| Establishment cooperation „Holzwärme Stellshagen GbR": | August 2008 |
| Begin planning: | August 2008 |
| Establishment cooperation: | March 2009 |
| Building permission for the station: | July 2009 |
| Installation heating grid: | 2008/2009 |
| Finishing station: | September 2010 |
| Launching heating system: | October 2010 |

***Technical data***

| | |
|---|---|
| Length heating grid: | 1,089 m |
| Wood chip vessel: | 190 kW |
| Wood chip storage: | 100 m³ / 50 m² |
| Heat storage tank: | 2 x 3,000 l |
| Solar thermal system: on the roof of the heating station | 67 kW 100m² |
| Transfer stations: | 15 - 45 kW |

***Financial data***

| | |
|---|---|
| Heating grid: | 73,621 € |
| Heating station: | 106,000 € |
| Heating system inclusive conveyor equipment and storage: | 121,232 € |
| Transfer stations (13 pcs.): | 42,000 € |
| Solar plant : | 27,163 € |

Overall Costs: 370,016 € (net, w/o additional charges)

*Figure 3 Installation of the heating grid*

## Conclusions

The citizens of Stellshagen are the first in the region, who are able to supply themselves with central heat made of local wood chips owned by them. They adduce evidence, that it is possible to build and operate a sustainable local heating system in a rural area.

## Next steps

Thus the project "HWS Holzwärme Stellshagen eG" is the first good practice for our initiative "(Bio)Energy Villages MV", while not coached by the initiative, but developed by the citizens itself.

***More information***

Cooperation
HWS Holzwärme Stellshagen eG
Mail: dietergehm@web.de
Architectural Planning
Architekturbüro Müller-Menckens
Mail: c.mm@archmueme.de
Technical Planning
Ingenieurgesellschaft Schiller & Drobka
http://www.schillerdrobka.de

Bioenergy Promotion


Part-financed by the European Union
(European Regional Development Fund and
European Neighbourhood and Partnership Instrument)

IV. Poster of the bioenergy actions of Grevesmühlen


## Background and Objectives

The development of the district heating with bioenergy is one result of coordination of city, municipal energy supplier, joint waste management authority in a association "Stadt ohne Watt" (means city without not green electrical Watt)

The association understands itself as engine for organisation and conversion of a sustainable development of the city Grevesmühlen and their surrounding areas. The central task of the association is initiation, bundling and networking of necessary activities on all levels. The concrete exemplary beginnings in the city Grevesmühlen led to focusing to energy policy measures. Beyond that handling energy is the most important key of sustainability.

Figure 1. Biomass potential of NWM

Figure 2. feeding the biogas plant

## Results

***Technical concept – Biogas plant***

1. stage of extension 2008

| | |
|---|---|
| Biogas: | 289 m³/Bh |
| electrical capacity: | 716 KW |
| heat capacity: | 600 KW |

2. stage of extension 2009
Additional 400 KW electrical power

***Supply in the district heating grid***

length: 8 km, supplied households: 1,700

build 2010 – new grid to the city centre, supply of: e.g. the City Town hall (savings 4,000 €/a)
scheduled 2011 – extension: 1km. new supply of: e.g. office building of county of North West Mecklenburg „Malzfabrik" (savings 2,400 €/a)

Provides **50%** of the households with **heat**

***Supply in the electricity network***

produced electrical power from

| | |
|---|---|
| biogas: | ca. 6 000 000 KWh/a |
| wind: | ca. 3 700 000 KWh/a |
| photovoltaic: | ca. 520 000 KWh/a |

Provides **100%** of the households with **electricity**

STADTWERKE GREVESMÜHLEN GMBH

Grevesmühlen - Stadt ohne WATT

Figure 3 pipes for the new grid

## Conclusions

This Project shows, that even small towns in a rural area can use advantages of bioenergy! Due to the municipal owning of the energy supplier and the joint waste management authority a coordinated development of the town is easily manageable by means of the association "Stadt ohne Watt".

## Next steps

In the town exists a public plan for development. All projects related to energy are discussed by different stakeholders in the association. The district heating grid will be expanded and consolidated as well. Cooperation between partners and even little villages around Grevesmühlen are possible.

***More information***

http://www.stadt-ohne-watt.de
http://www.stadtwerke-gvm.de

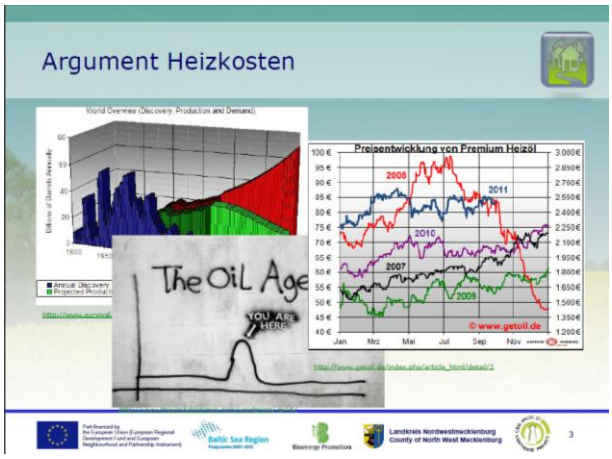
Bioenergy Promotion



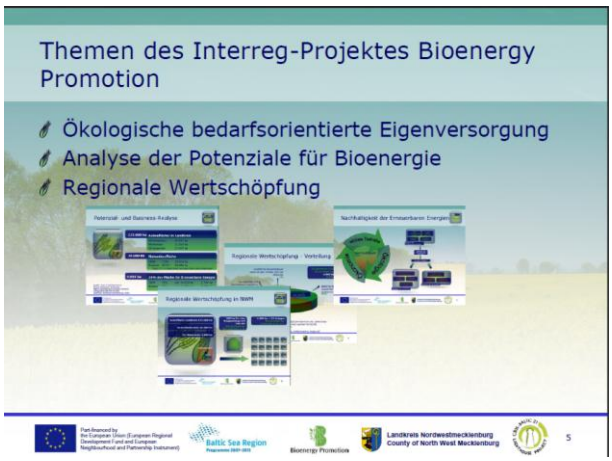
Part-financed by the European Union
(European Regional Development Fund and
European Neighbourhood and Partnership Instrument)

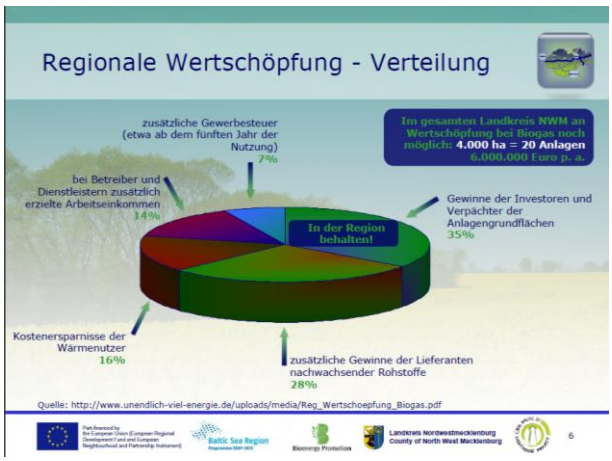
V. Lecture/information for municipal council (here Damshagen)







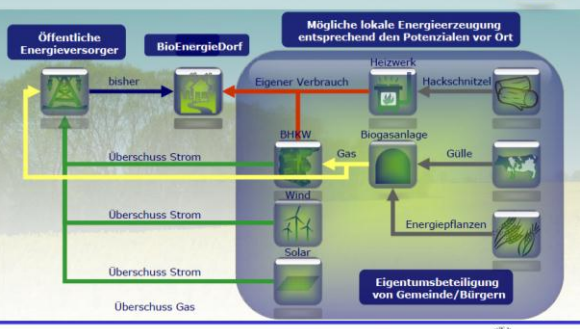




Part-financed by the European Union
(European Regional Development Fund and
European Neighbourhood and Partnership Instrument)

## (Bio)EnergieDorf MV




## Soziale Teilhabe

- günstige Energiepreise
  - durch EEG-Förderung (20 Jahre garantierte Bezahlung!)
  - Unabhängig von Preisen fossiler Energie
- Miteigentümer
  - Mitsprache bei Entscheidungen
  - Mögliche Gewinnausschüttungen (2.Rente)
- Identifikation mit dem Ort

## Richtfest Holzhackschnitzel-Heizhaus der Energiegenossenschaft Stellshagen am 17.09.2010

## Agenda

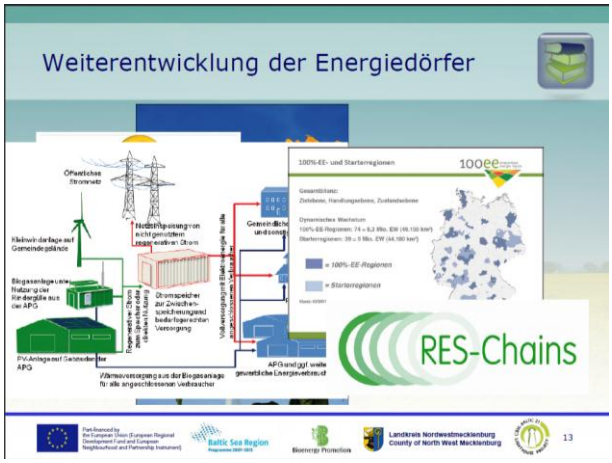
- Fakten zur Bioenergie
  - Woher bekommen wir unsere Energie?
  - Wie sieht es in NWM aus?
  - Was können wir tun?
- Stand Entwicklungen in unserm Landkreis
  - Übersicht der Beschlussgemeinden
  - Weiterentwicklung der Energiedörfer
  - Unterstützung des Landkreises

## Übersicht der Beschlussgemeinden in Nordwestmecklenburg


## Weiterentwicklung der Energiedörfer




Part-financed by the European Union
(European Regional Development Fund and
European Neighbourhood and Partnership Instrument)


Weiterentwicklung der Energiedörfer
RES-Chains
13


Danke!
Mit 100% Energie dabei !?
Netzwerk Bioenergie in Nordwestmecklenburg
Noch nicht auf der Karte?
http://www.bioenergypromotion.net
http://res-chains.eu
Koordination im Landkreis Nordwestmecklenburg
Yvonne Rowoldt
Telefon 03881/ 722 222
Telefax 03881/ 722 9 222
Email y.rowoldt@nordwestmecklenburg.de
Bioenergie Erzeuger
Bioenergie Projekt
Bioenergie Organisation
Bioenergie Person
14