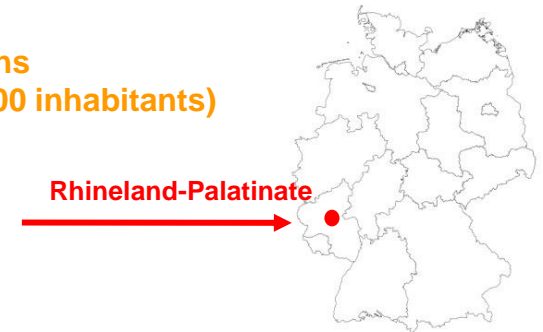
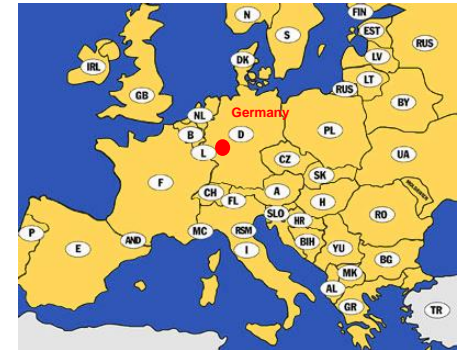


Introduction

District of Rhein-Hunsrück



- 102.000 inhabitants
thereof 8.088 foreigners
(12 from Japan)
- Area: 991 km²
- 137 local congregations
(75% with less than 500 inhabitants)



Architect Frank-Michael Uhle

Climate Protection Manager

District administration of the district of Rhein-Hunsrück

Ludwigstraße 3-5, 55469 Simmern, Germany

Phone: +49 6761 82611

Email: fm.uhle@rheinhunsrueck.de





Rural structured district

45% forest area

42% agriculture

(110 agricultural enterprises with more than 100 ha, another 708 agricultural enterprises with less than 100 ha)





Middle Rhine Valley

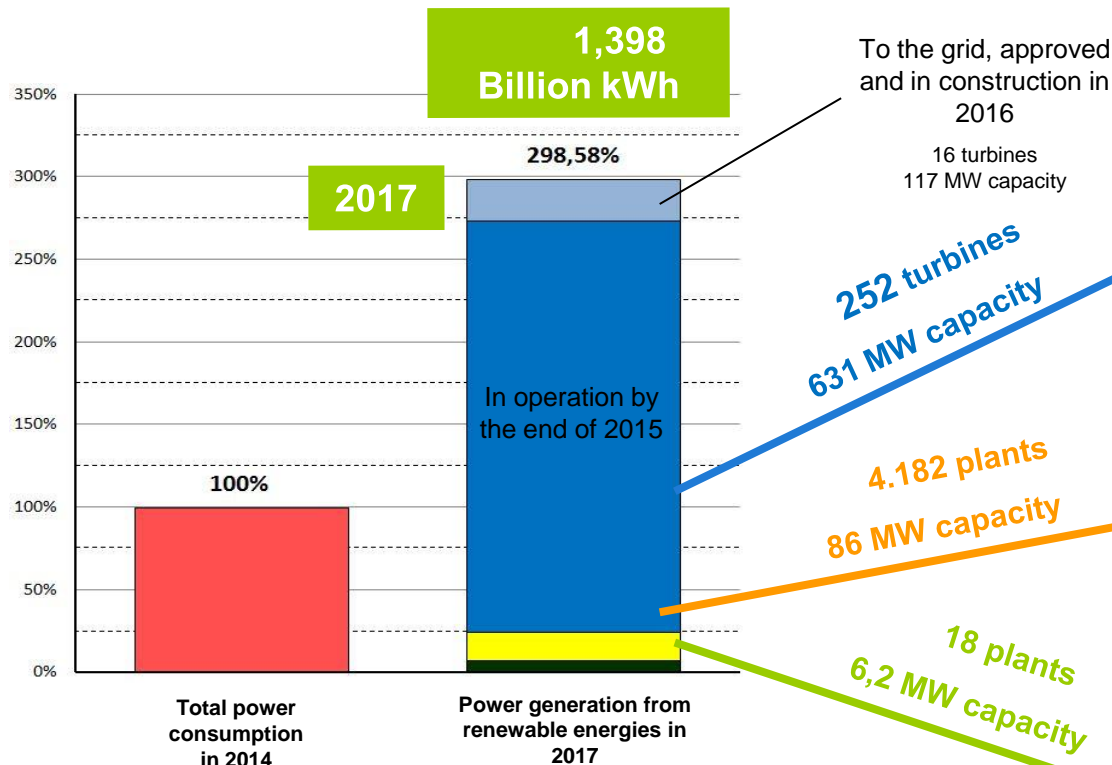
2 Million overnight-stays per year
viticulture

Historical Heritage
UNESCO World Heritage

The share of renewable electricity in the district probably will be at 298 % by the end of 2017



Total power consumption 468 Mio. kWh in 2014



informational:
Hydro power

Ø Federation
3,3 %

since 2010: Pilot project river turbines
in the Rhine at St. Goar



Wind energy

State by the end of
2015

249,62 %
Ø Federation 11,0 %



Photovoltaic

16,73 %
Ø Federation 6,0 %



Bio mass

7,09 %
Ø Federation 7,8 %



Share of renewable energies: 298 % Ø Federation 32 %

14 bio mass local heat networks in operation

Example: Material Flow Management

Public building complexes are merged to district heating networks and heated with **tree and shrub cuttings** (120 collecting points, central treatment place)

The first step: Fuel preparation in the central processing place

Startscreen



High quality compost:
approx. 50% of the total
material

Fuel:
approx. 50% of the total material



Fuel storage facility

The second step:
Thermal processing in the
central heating station
with burning capacity
of 500 to 850 kW



Central heating station

→ Annual savings
680.000 Liters
Fuel oil equivalent

Three biomass-heating networks
in school centers:

22 school buildings,
8 sports halls, 1 town hall
2 indoor and 1 outdoor
swimmingpools,
1 library, 1 old people's home

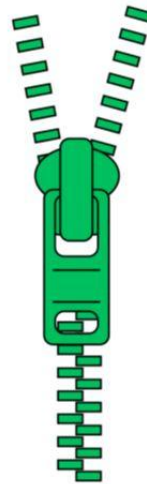
Regional value creation and Public service

Recognition of interfaces and use!

Step by step we convert 290 Million Euro annual energy import costs into regional jobs and value creation by way of energy efficiency and renewable energies!



Renewable energies/
energy efficiency



Demographic change/
Public service





ERNEUERBARE ENERGIE

(Renewable energy)

**Heimat der
Vor-Macher**

(Home of the demonstrators)

It is demonstrated by the province: With a lot of pragmatism and an inner conviction around 300 % of green energy are already produced in the district of Rhein-Hunsrück in 2015. Here the energy revolution is working as a giant program for the promotion of the economy.

- By Ralf Köpke



Quelle: E&M annual magazin of 2012

Public services via renewable energies at the example of the local congregation Mastershausen



Private Wind- and Solar parks on communal owned areas



14 Wind turbines (step by step since 2007)

Therefore the community gets a rent as well as a percentage earnings share, which depends on the wind income

Rental incomes from the wind energy for the local congregation: approx. 300.000 € per annum, contract period 20 years



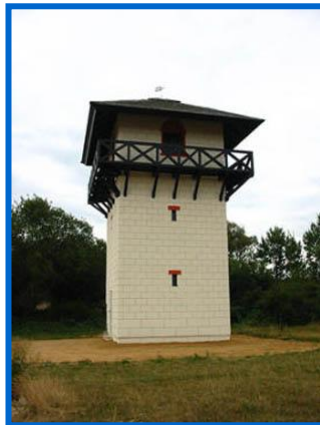
**Photovoltaic systems on terrain with 2 MW capacity
commissioning in December 2010**

The plant will become property of the local congregation after 25 years

**Rental incomes for the local congregation:
630.000 € uniquely payment in October 2010**

Public services via renewable energies at the example of the local congregation Mastershausen

District administration of the
district of Rhein-Hunsrück



The local congregation is using its rental income from the Wind and Solar park for:

- Expansion of local streets 570.000 €
 - Vitalization program for old buildings in the village center 50.000 € per year
 - Support for local clubs annual 15.000 € for 10 clubs in total
 - Reconstruction of the old school into a retirement home with a meeting room 1.500.000 €
 - New construction of a training room for the music club 50.000 €
 - New construction of a youth hall 60.000 €
 - New construction of a library 17.000 €
 - New construction of a Kindergarten, own contribution 160.000 €
 - Renewal of the playground 40.000 €
 - Creation of a natural recreation area 151.000 €
 - New construction of a premium hiking trail 30.000 €
 - DSL-connection, own contribution 101.000 €
 - New construction of a viewing tower 37.000 €
 - Support for the neighbor communities
- ...and much more...

The road to success: LHN in the villages

Combined LHN:
Villages Külz and Neuerkirch 2015
Mayor (retired) Aloys Schneider and Volker Wichter

Target:
Climate Protection - Volunteering Villages
for Energy Saving, completely renewable
heat- und power supply
(by wind power/Storage- and/or
PV/Storage-Combination

Builder-owner:
**Energieversorgung der Region Simmern
(ERS) at in-house operation VG-Werke
Simmern**

Source: Rhein-Hunsrück-Zeitung, 20.09.2016



Approx. 142 buildings in 2 villages
80% ratio
(total 757 citizens)

Planned:
**2 wood chip-boilers,
1.420 m² solar thermal field**

Start of construction
Operational

Spring 2015,
Summer 2016



Overview by: ERS Simmern

Photo: energy agency rhineland palatinate/Sonja Schwarz

**The largest solarthermal supported LHN
in Rhineland-Palatinate has been built**



District heating systems with wood chips

Local heat supply systems in communities

Collective, solar thermal supported local heat network: **Local congregations Külz and Neuerkirch 2015**



District heating systems with wood chips

Local heat supply systems in communities

Collective, solar thermal supported local heat network: **Local congregations Külz and Neuerkirch 2015**



Source: ibs Energie, Stromberg

District heating systems with wood chips

Local heat supply systems in communities

Collective, solar thermal supported local heat network: **Local congregations Külz and Neuerkirch 2015**



Source: ibs Energie, Stromberg

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District heating systems with wood chips

Local heat supply systems in communities

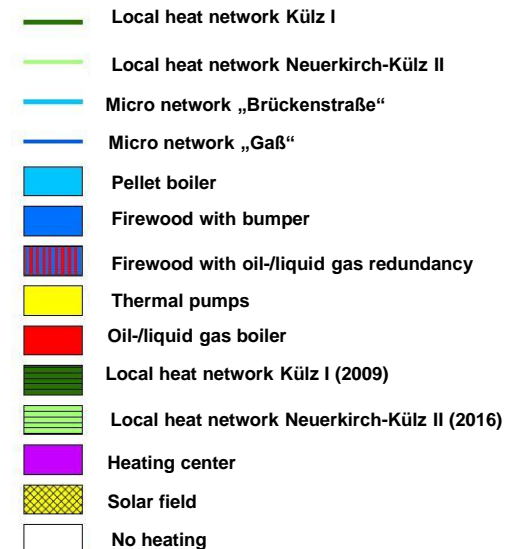


Collective, solar thermal supported local heat network: **Local congregations Külz and Neuerkirch 2015**



The climate protection targets of the federation for 2050 in the heating section are already reached today !

(284 inhabitants in the village in total)



16

District heating systems with wood chips

Local heat supply systems in communities



source: Energieagentur Rheinland-Pfalz/Sonja Schwarz

The two local congregations of Kùlz and Neuerkirch have jointly implemented the largest district-heating network in Rhineland-Palatinate.

This represents the current high point of the rapid expansion of the citizens' heat in our district (the 15th network is under construction).

In addition, the local congregations offer their citizens numerous offers in the sense of the provision of life in order to make the places fit for the future.

„The income from wind farms has helped us realize our sustainable village development concepts for our citizens!!“

Volker Wichter, Mayor of Neuerkirch

District heating systems with wood chips Local heat supply systems in communities

source: Energieagentur Rheinland-Pfalz/Sonja Schwarz



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Public services via renewable energies at the example of the local congregation Mörsdorf



Private Wind parks Mörsdorf North and South, partially communal owned areas:

(Wind electricity in Mörsdorf) Windstrom in Mörsdorf

Elf Anlagen...

- ... erzeugen jährlich durchschnittlich 74 Millionen Kilowattstunden Strom
- ... decken den Bedarf von 62.000 Menschen in ihren Häusern und Wohnungen
- ... reduzieren den Kohlendioxidausstoß um jährlich 56.000 Tonnen

(Eleven turbines...

- ...produce an annual average of 74 Million kWh electricity
- ...satisfy the needs of 62.000 people in their houses and apartments
- ...reduce the emission of carbon dioxide up to 56.000 tons per year)



11 wind turbines with a capacity of 2.4 MW since 2015

Therefore the community is getting a rental income as well as a percentage earnings share depending on the wind income

Rental income from the wind energy for the local congregation:

approx. 205.000 € in 2016, plus 1.850 € from the solidarity pact of the former municipality of Treis-Karden

Rheinland-Pfalz bekennt sich zur Energiewende: Ziel ist es, bis zum Jahr 2030 den Strombedarf bilanziell vollständig mit erneuerbaren Energien zu decken.

Der Windpark trägt maßgeblich zur kommunalen Wertschöpfung bei: Für die Flächen der Windkraftanlagen im kommunalen Eigentum fließen Pachtzahlungen in die Gemeindekasse. Für alle Anlagen

bleibt zudem ein großer Teil der Gewinne in Mörsdorf. Mit dem Bau der Infrastruktur beauftragt ABO Wind soweit möglich lokale Unternehmen. Über den Solidarpakt der Verbandsgemeinde Treis-Karden sind die Ortsgemeinden an den Einnahmen der Flächen keine Windkraftanlagen werden können.

Source: Abo-Wind, exhibition in the coffee shop of the museum Mörsdorf

Public services via renewable energies at the example of the local congregation Mörsdorf

District administration of the district of Rhein-Hunsrück



„Without the income from our wind turbines and the support of the operator Abo-Wind the bridge would have stayed a dream“

Marcus Kirchhoff, Mayor of Mörsdorf
on the occasion of the opening at the 3rd of October 2015



The three „Bridge dreamers“ Marcus Kirchhoff, Hans-Peter Platten and Ingo Börsch



Guten Morgen

Volker Boch
über das Schöne,
das so nah liegt



Golden Gate und Geierlay

Kurzurlaube sind sexy, sagen die Tourismusexperten, die sich am Mittwoch in Bingen getroffen haben. Mal

People used to take trips to London, Pisa or Venice, but now they are also coming to Mörsdorf!

licher Anlehnung an Asterix, kleine mürrische Dorf wird nicht müde, Gäste zu empfangen und sich damit den großen Reisezielen dieser Welt zu erwehren als wären es die umliegenden Römerlager Kleinbonum,

The bridge is kind of the Golden Gate Bridge of the Hunsrück

Source: Rhein-Hunsrück-Newsletter from the 27th of November 2015

Public services via renewable energies at the example of the local congregation Mörsdorf

District administration of the district of Rhein-Hunsrück



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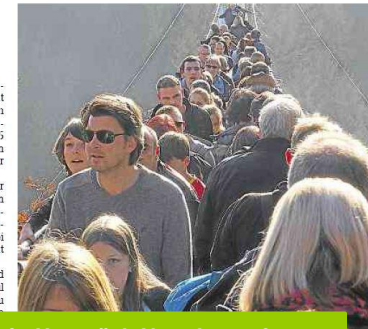
Source: Rhein-Hunsrück-Newsletter, from the 4th of November 2015



The people of Kastellaun are counting more tourists

In the first half of 2015 more guests were coming

ist dies, verglichen mit den Zahlen aus dem ersten Halbjahr 2014, klar zu erkennen.
So kamen im ersten Halbjahr 2015 durch den Aufenthalt von 11 394 Gästen 33 206 Übernachtungen zustande. Dies bedeutet einen Zuwachs von 8,3 Prozent bei den Gästezahlen und 33,4 Prozent bei den Übernachtungen.
Die Erhöhung der Gäste- und Übernachtungszahlen ist zum Teil auf die seit dem 1. Juli 2014 neu zum Verbandsgemeinde Kastellaun gehörende Hängeseilbrücke in Mörsdorf zurückzuführen.



tistik der Verbandsgemeinde Kastellaun berücksichtigt. Davon abgesehen haben die zahlreichen Traumschleifen Saar-Hunsrück und die im Frühjahr eröffnete Verlängerung des Saar-Hunsrück-Steiges von Idar-Oberstein über Kastellaun nach Boppard, den Wandertourismus im Hunsrück drastisch in Schwung gebracht.
In der Verbandsgemeinde Kastellaun geht man davon aus, dass durch die Eröffnung Deutschlands längster Hängeseilbrücke in Mörsdorf die Gäste- und Übernachtungszahlen weiter stetig ansteigen werden. Die positive Entwicklung zeigt, dass sich die Verbandsgemeinde Kastellaun als Feriendestination im Hunsrück kontinuierlich zu einer starken Tourismusregion entwickelt.

Source: Rhein-Hunsrück-Newsletter, from the 25th of November 2015

Weitere Infos: Tourist-Information Ferienregion Kastellaun, Marktstraße 16, Telefon 06762/401 873 oder 401 608, E-Mail info@kastellaun.com, www.kastellaun.com

The „Geierlay“ is the number 85 of the most favorite destinations of foreign tourists – four places ahead of the „Hofbräuhaus“ of Munich

Source: German central for tourism (DZT), Survey among 40.000 participants

Public services via renewable energies at the example of the local congregation Mörsdorf

District administration of the district of Rhein-Hunsrück



The former place of „Summer freshness“ had been revived

Source: Rhein-Hunsrück-Newsletter, from the 4th of November 2015



Source: www.geierlay.de

Source: www.geierlay.de

(3rd of October – 1 year „Geierlay“)

3. Oktober - 1 Jahr Geierlay

170.000 visitors per year were expected

Already 340.000 visitors had been on the bridge in the first year



klick für weitere Infos
(Click here for further information)

Public services via renewable energies

The value creation is helping the communities to deleverage

District administration of the
district of Rhein-Hunsrück



60 out of 137 communities are gaining rental incomes from the wind energy

Rhein-Hunsrück has got the exceedingly fewest

Statistic: The budget situation in the district, its municipalities and communities is the most solid nationwide

Debts of overall community budget in 2015 (Selection)

	Sum (in Mio. Euro)	Change	Per capita
District of Rhein-Hunsrück	60,7	+ 3,4 %	594
District of Cochem-Zell	117,9	- 3,7 %	1896
District of Bernkastel-Wittlich	273,3	+ 2,9 %	2455
District of Rhein-Lahn	228,8	- 5,7 %	1879
District of Mayen-Koblenz	477,7	-2,9 %	2264
District of Birkenfeld	323,6	+5,9 %	4021
District of Bad Kreuznach	357,6	-3,0 %	2759
City of Koblenz	412,6	- 4,7 %	3698
District of Mainz-Bingen	185,5	-8,6 %	905
Rhineland-Palatinate	12 596,3	+ 0,9 %	3132

Information: Statistical State
agency



In the 19th century people emigrated to America, because the Hunsrück could not feed them any more.

Source: Rhein-Hunsrück-Newsletter, from
the 22nd of August 2016