

# ENERGY TRANSITION

## A BOOST FOR LOCAL VIABILITY IN GERMANY

### ENERGY TRANSITION – ENGINE OF GROWTH IN EUROPE'S REGIONS

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Brussels, 8th October, 2014



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# AEE – THE RENEWABLE ENERGIES AGENCY

Founded by the renewable organisations and the Federal Ministry of Environment in 2004

Financially supported by the organisations and companies of the renewable energies sector

Projects for the Federal Ministry for Economic Affairs and Energy and the Federal Ministry of Food and Agriculture



Team of the AEE

# TOPICS

- 1 The status quo in Germany
- 2 Local viability
- 3 Best Practices



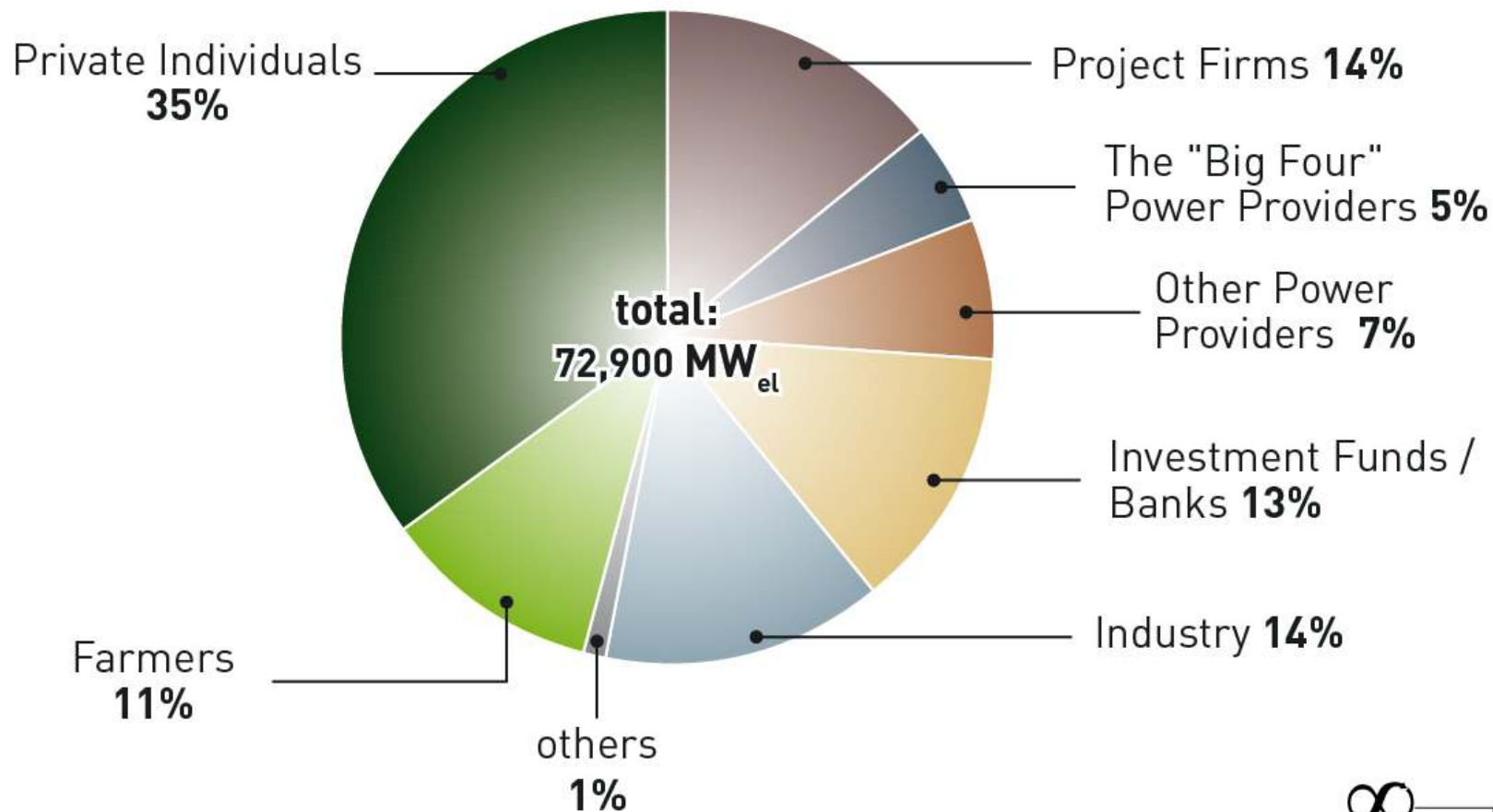
# THE STATUS QUO IN GERMANY



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## Renewable Energy in the Hands of the People

Ownership distribution of installed RE capacity for power production  
2012 throughout Germany.



Source: trend research; as of: 04/2013

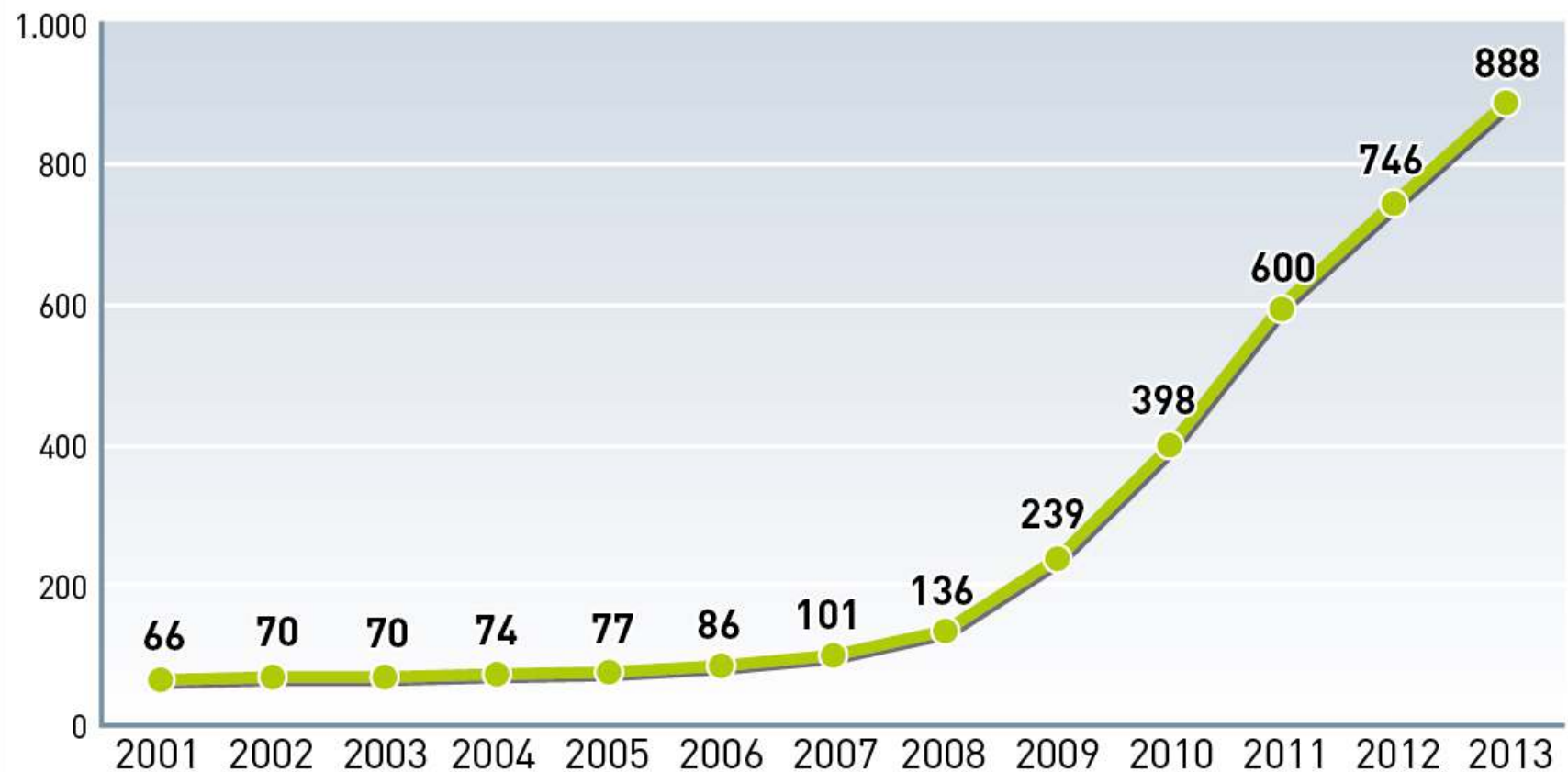
[www.renewables-in-germany.com](http://www.renewables-in-germany.com)



# THE STATUS QUO IN GERMANY

## Energy cooperatives in Germany: A success story

Over the last few years the number of energy cooperatives increased sharply.



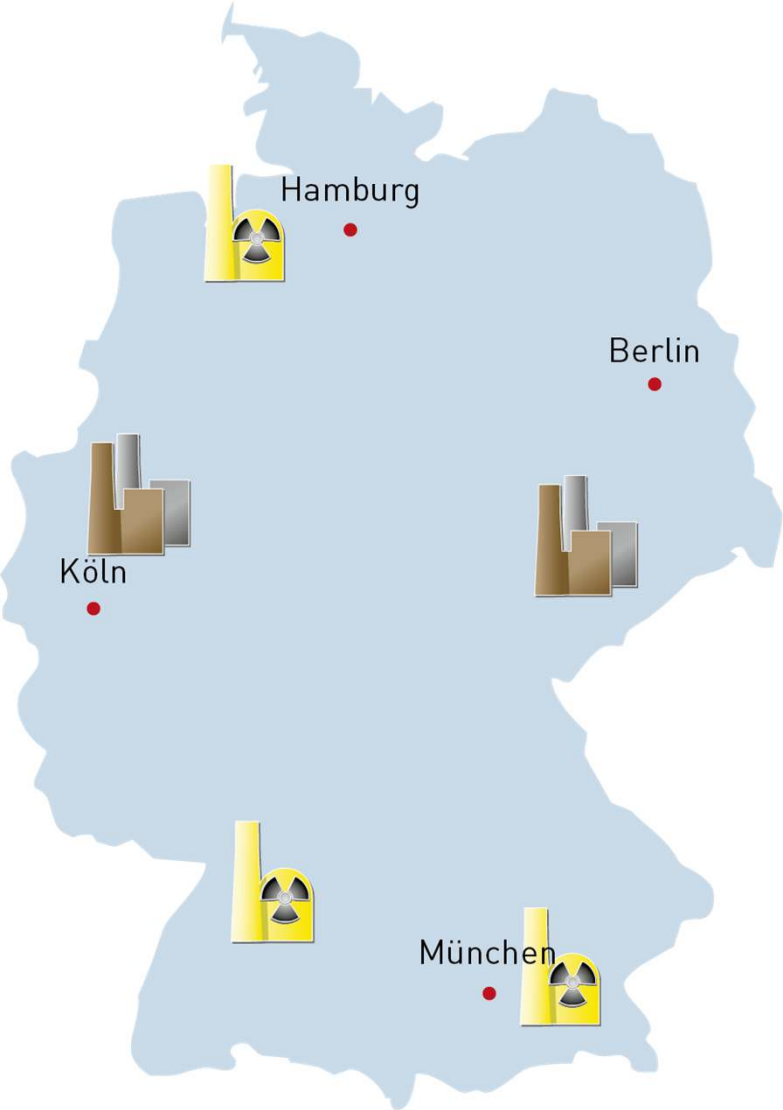
Source: Klaus Novy Institut; as of: 1/2014

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# LOCAL VIABILITY



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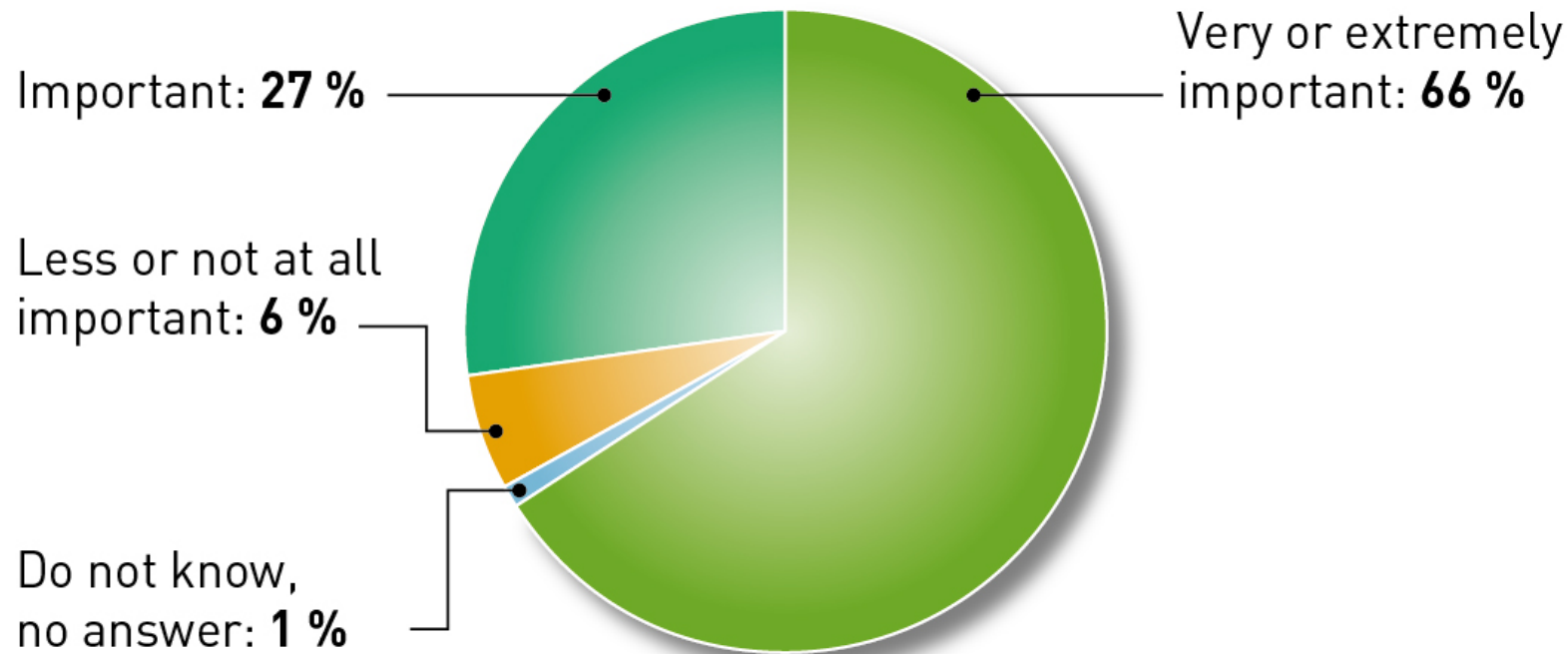
# LOCAL VIABILITY



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## 93 percent of Germans support the increased development of renewable energy

The use and development of renewable energy sources are ...



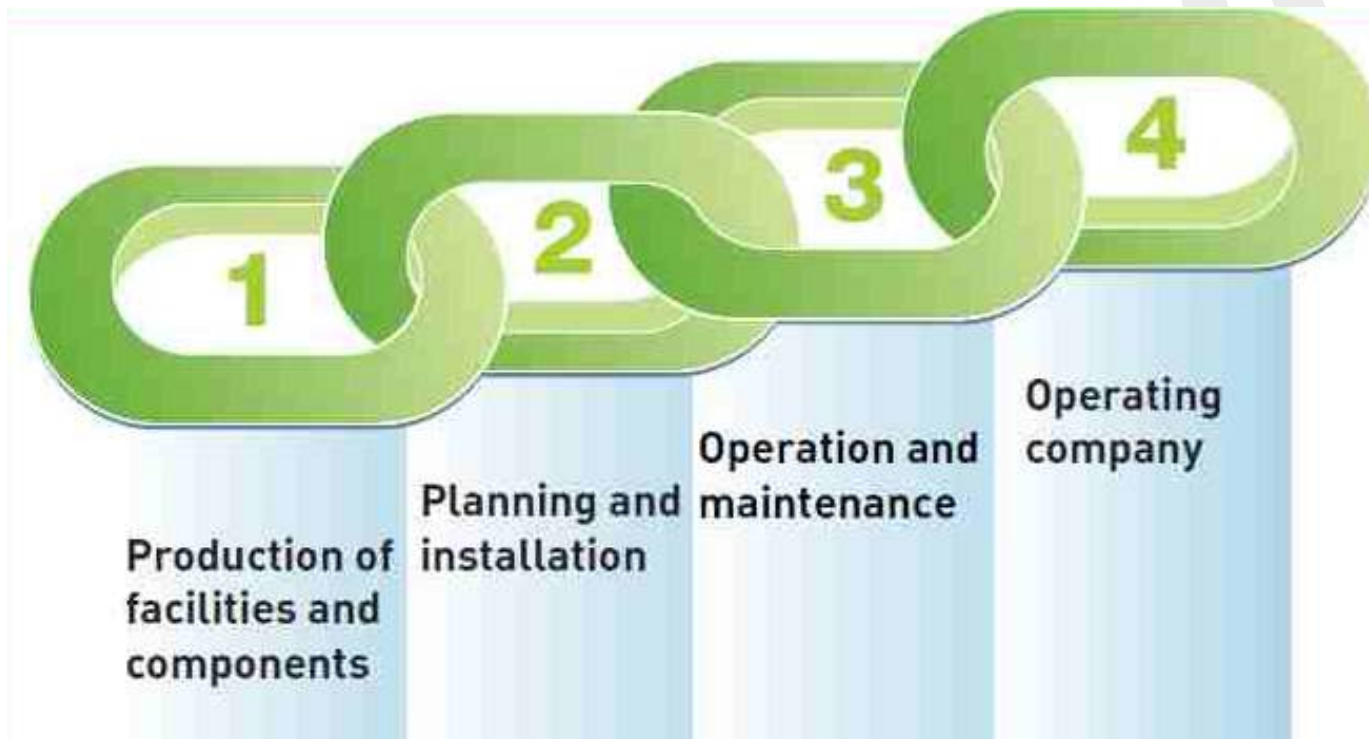
Source: Survey by TNS Emnid 2013, 1003 respondents on behalf of the Initiative Erneuerbare Energiewende Jetzt!; as of: 09/2013

[www.renewables-in-germany.de](http://www.renewables-in-germany.de)



# LOCAL VIABILITY

## VALUE CREATION BY RE IN MUNICIPALITIES



**more than  
16 billion Euro / year**



# LOCAL VIABILITY



## Employment trends in the German renewable energy sector

After years of continuous growth, 2012 showed a slight decline in jobs, mainly caused by the solar industry crisis. Due to positive developments in the wind and bio energy sector, the total number of jobs stagnated at approximately the previous year's level.

**Industry target  
2020: 500.000**



Sources: BMU/AGEE-Stat, DLR/DIW/ZSW/GWS/  
Prognos, UBA, BEE, as of: 3/2013

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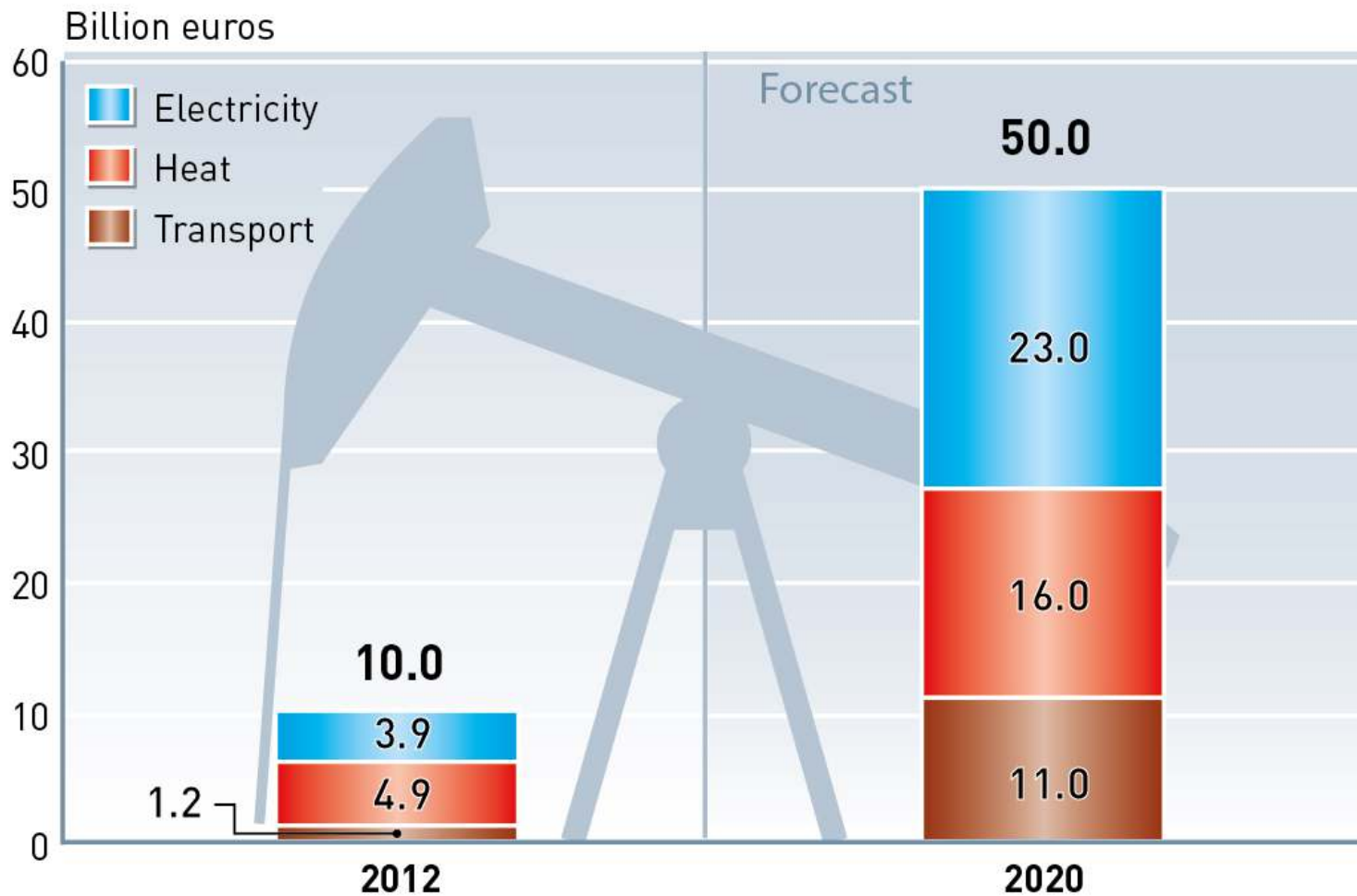


# LOCAL VIABILITY



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## Avoided costs for fuel imports due to the use of renewable energy



Sources: BMU (07/2013), Industry forecast (10/2009)

[www.renewables-in-germany.de](http://www.renewables-in-germany.de)

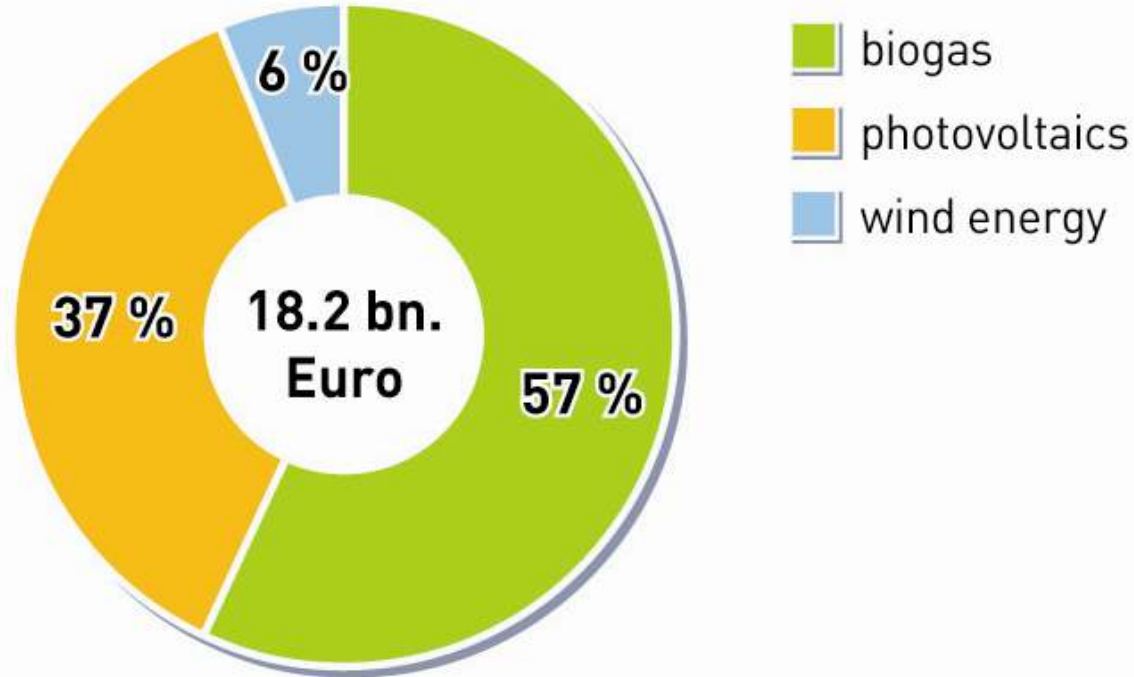


# LOCAL VIABILITY



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## Investments of the agricultural sector in RE



Sources: P&M / DBV  
as of 7/2013

[www.renewables-in-germany.com](http://www.renewables-in-germany.com)



# LOCAL VIABILITY

The federal government and the “Länder” (states) share legislative power. Federal States have legislative power concerning all planning activities.

However, local authorities are independent in their decisions on how to organize local services such as energy supply or waste treatment and local planning decisions and building codes.

This makes local governments **key actors in Germany’s Energy Transformation.**



# LOCAL VIABILITY

THE COMMUNITIES ARE THE STAGE FOR THE ENERGY SHIFT.  
MUNICIPALITIES PLAY A KEY ROLE ON DIFFERENT LEVELS:

**As property owners** they install RE.

**As planning authority** they ensure the implementation.

**As a consumer** they support green energy.

**As an advising instance** they provide information.

**As energy supplier** they run power plants.

They act as an **inspiring example**.

# BEST PRACTICES

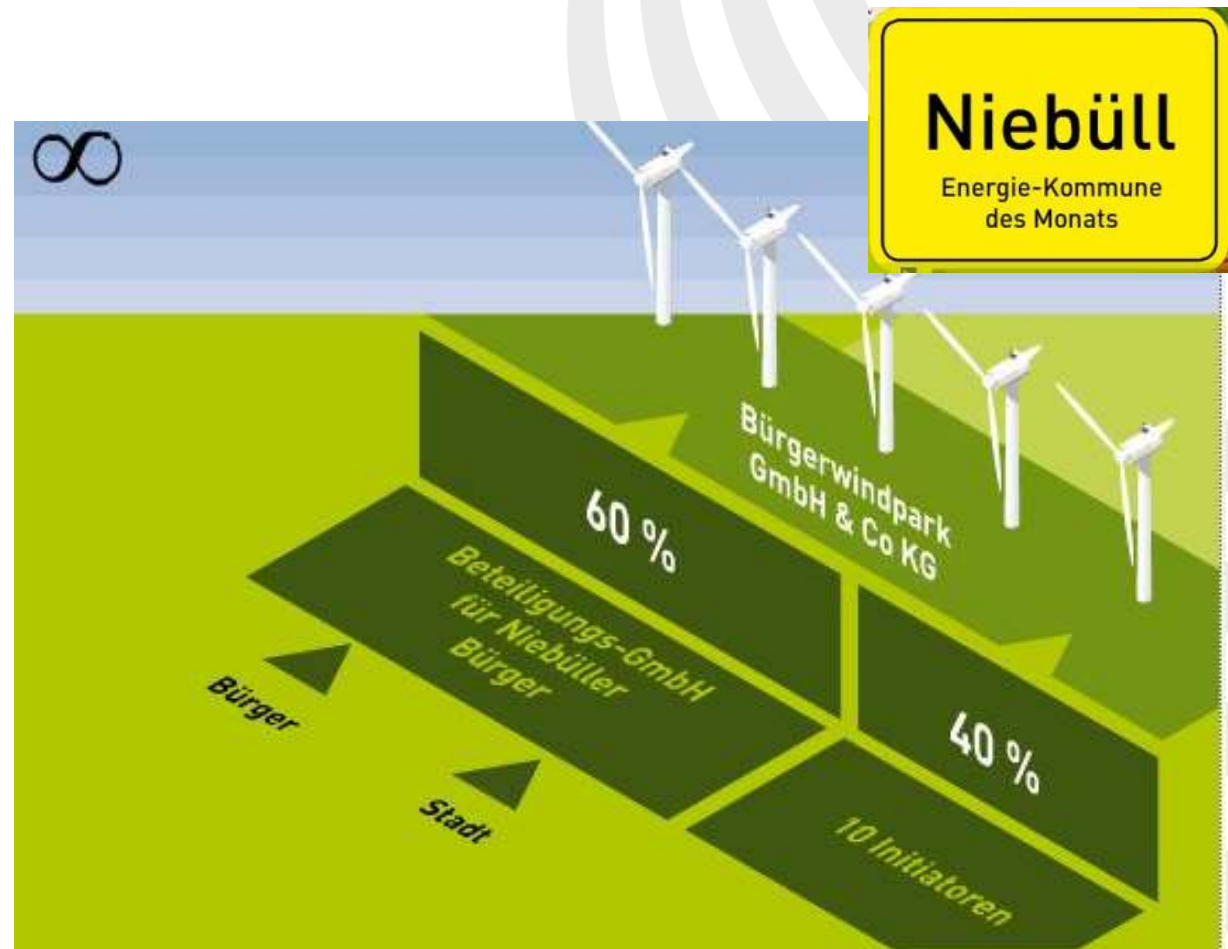
## NIEBÜLL

9.300 inhabitants

850 citizens participate  
in a windfarm

3 million euros  
directly invested

Credits come from local  
banks



# BEST PRACTICES

## SCHLALACH

16 windmills generate multiple of the energy consumption of the inhabitants

Leases of 300.000 euros per year

The pooling of the area brought together the interests of 120 landowners



# BEST PRACTICES

## LICHTENAU

Electricity from a windfarm is sold  
Directly to the residents

The price of 19,5 cent per kWh (plus  
Value-added tax) is very cheap

The price is guaranteed for 10 years





# BEST PRACTICES

## ENERGY COOPERATIVE ODENWALD

1.400 participants in der Genossenschaft with stakes between 100 to 5.000 Euro

Investitionen of 25 million Euro

The cooperative is selling electricity with a price of 25,2 cent per kWh



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# BEST PRACTICES

## ENERGY COOPERATIVE SCHLÖBEN

An agricultural cooperative is producing biogas and sells electricity

Municipality, cooperative and citizens built a district heating

The citizens founded an energy cooperative that connected the households for free



# BEST PRACTICES

## SCHWÄBISCH HALL

The energy supplier Stadtwerke Schwäbisch Hall are community owned.

The Stadtwerke Schwäbisch Hall are investing into RE projects such as wind parks and district heating with biogas.

Therefore the Stadtwerke work together with farmers, private persons and the rural district.



# BEST PRACTICE

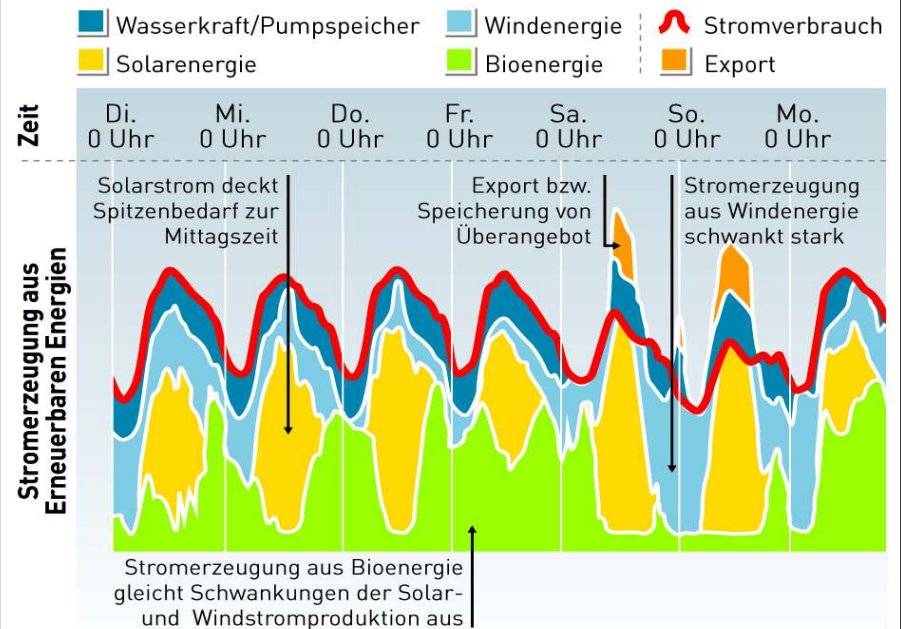
## PELLWORM

The island Pellworm is running a regional combined power plant



### Erneuerbare Stromversorgung benötigt die flexibel einsetzbare Bioenergie

Deckung des Verbrauchs durch...



Quelle: www.kombikraftwerk.de  
Stand: 8/2013

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# BEST PRACTICES

## DOLLNSTEIN

Municipality installed a smart district heating

The system works with 30° C in summer and with 80° C in winter

2 stores (15.000 und 27.000 l) and stores in all houses

