



Energy-saving-check  
It's simple; fast;  
efficient! Count me in!



# Policies and measures to address energy poverty in Germany

REACH conference at Ljubljana

Barbara Kalker for Caritas Germany, January 19<sup>th</sup>, 2017

Ein Verbundprojekt von:



Bundesverband der  
Energie- und Klimaschutzagenturen  
Deutschlands e.V.

Gefördert durch:



Bundesministerium  
für Umwelt, Naturschutz,  
Bau und Reaktorsicherheit



aufgrund eines Beschlusses  
des Deutschen Bundestages

# Overview

- Introduction to Energy Poverty in general
- Energy Poverty in Germany
- Examples, Ideas, Concepts and Projects
- Examples of energy saving projects for low income households in Germany
- Energy-Saving-Check in Cooperation with Local Authorities – Households with low incomes for climate protection
- Demands and Conclusions

# An Attempt to define Energy Poverty

There is no agreed EU wide definition commonly agreed upon.

A working definition widely used:

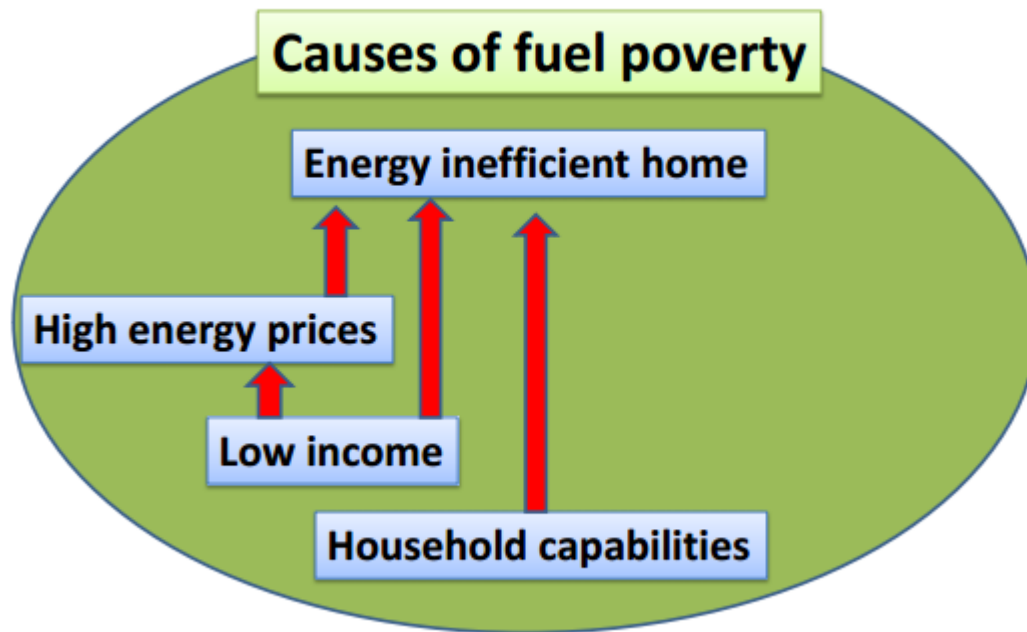
*Energy poverty occurs when a household cannot afford their energy/electricity bill and/or keep their flat/house adequately warm at reasonable cost.*

It is often estimated that in energy poor households energy bills exceed 10% of the household's income.

# Introduction to Energy Poverty in general – Energy Poverty Development

Energy Poverty develops from a mix of social, energy and housing problems...

## 1. Settling for simpler definitions

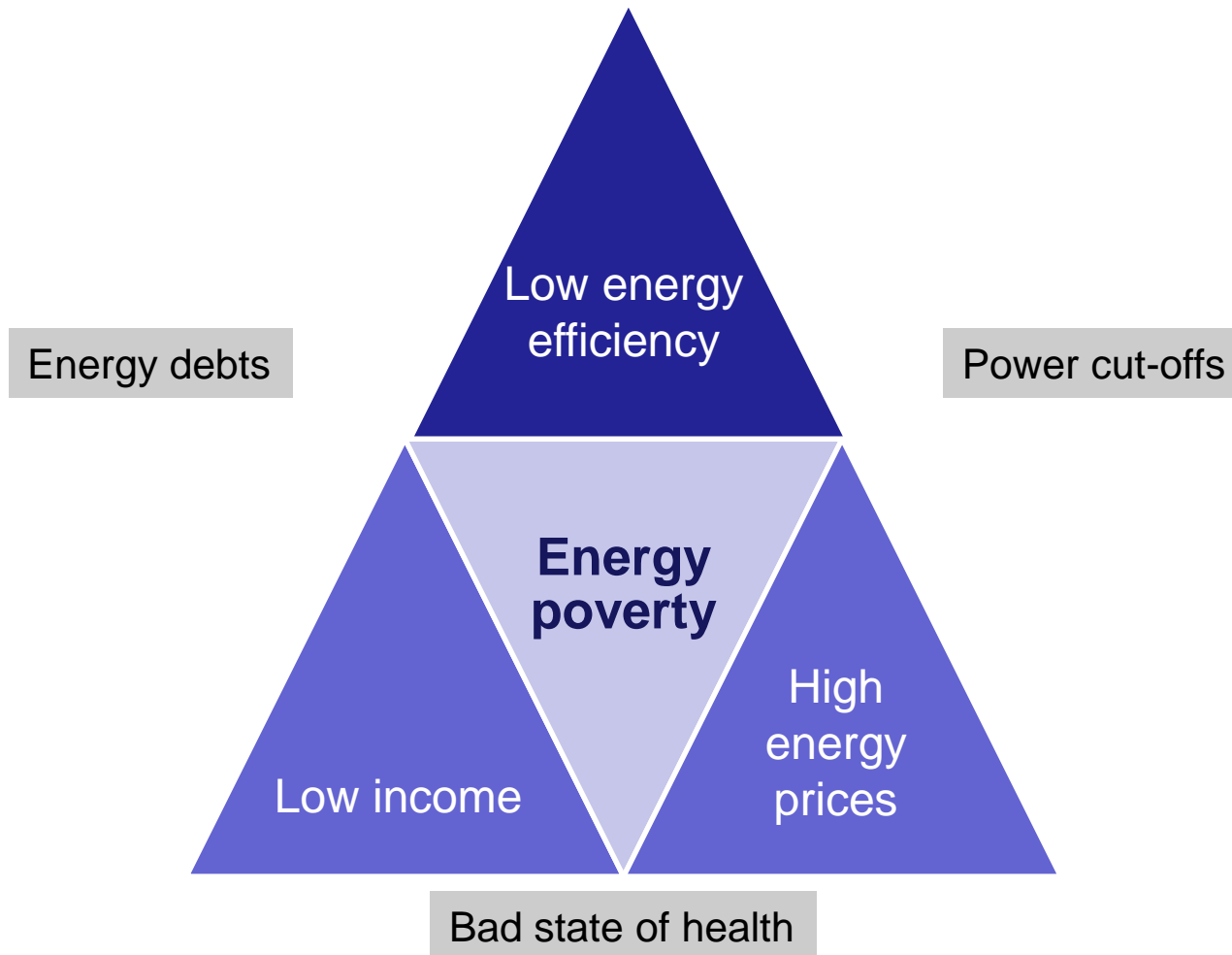


Sources: Boardman, 1991; DuBois, 2014

- lack of financial resources to invest in energy efficient technology
- little knowledge in low-income households on the possibilities to save energy
- lack of information inside target group

# Introduction Energy Poverty in general – Consequences of Energy Poverty

... and leads to debts, power cut-offs and bad health!



# Energy poverty in Germany

- In Germany **7,7 Million** people receive social welfare benefits
- Energy debts become relevant to an increasing number of people through rising energy prices
- In 2014 **350,000\*** households in Germany were hit by power cut-offs
- Energy cut-offs followed by high connection costs enhance the **spiral of indebtedness and poverty**
- Energy cut-offs intensify poverty and **social isolation**
  - Health impairment
  - Existential impairment of everyday life
  - Shame and exclusion
- the burden caused by the exit from nuclear and fossil-fuel energy is higher on low-income households than on other households – higher energy prices and less possibilities to substitute

\* Bundesnetzagentur, as of Jan 17<sup>th</sup> 2017

# Energy Poverty in Germany – Low Income Households – Who are they?

## Households receiving low wages

- Income is too low to make a living above the poverty line but not low enough to receive social transfers.

## Households receiving Social Transfers

- Basic housing costs are taken care of, but grants for energy are often not sufficient.
- (7.7 mio. people\*: Job Seeker Allowance, Social Care for people not able to work, Housing Allowance)

*\* Caritas Energy Savings Project has since 2008 reached about 3% of the complete target group*

## Examples ideas, concepts and projects to support energy poor households in Germany

<b>Federal Social Support System</b>	<ul style="list-style-type: none"><li>○ Expenses for housing and heating are covered by transfers by municipality and the federal state</li><li>○ Expenses for electricity are calculated into social transfers</li></ul>
<b>e.on Bavaria</b>	<ul style="list-style-type: none"><li>○ Monthly reductions of payment to authorized households</li><li>○ Lotteries for efficient electronical devices</li><li>○ Cooperation of e.on with welfare associations</li></ul>
<b>City of Bielefeld</b>	<ul style="list-style-type: none"><li>○ Admitting higher housing costs per m<sup>2</sup> for social transfer households</li><li>○ m<sup>2</sup>-prices allowed relate to energy efficiency of the flat<ul style="list-style-type: none"><li>○ enables households in social transfer to move into energy-efficient housing</li><li>○ motivates owners to “upgrade” their property</li></ul></li></ul>



# Examples ideas, concepts and projects to support energy poor households in Germany

<b>Power Saving Initiative (ONLINE)</b>	<ul style="list-style-type: none"><li>○ Offers online self-checks</li></ul>
<b>Energy Saving Projects (by different actors)</b>	<ul style="list-style-type: none"><li>○ Support and consulting</li><li>○ Offer information</li><li>○ Create awareness</li><li>○ Offer devices</li></ul> <p><b>Examples: Energy-Saving-Project by Caritas Germany, Basic-Check-Consultancy by the Consumer Association</b></p>
<b>Smart Metering</b>	<ul style="list-style-type: none"><li>○ Warning when consumption is too high</li><li>○ Limiting consumption to a (affordable) maximum</li><li>○ Avoiding cut-offs</li></ul>

## Examples ideas, concepts and projects to support energy poor households in Germany

<b>Prepaid Electricity Meter</b>	<ul style="list-style-type: none"><li>○ <b>Creating more awareness</b></li><li>○ <b>Avoiding cut-offs</b></li></ul>
<b>Mini Contracting for exchange of refrigerators</b>	<ul style="list-style-type: none"><li>○ <b>Federal, state or community level</b></li><li>○ <b>In some cases offered by energy companies</b></li><li>○ <b>Helps households to invest in an efficient refrigerator and pay off by savings</b></li></ul>
<b>Programs that support energy efficient modernization of housing</b>	<ul style="list-style-type: none"><li>○ <b>Programs that support energy efficient modernization of housing and make it available to low income households</b></li></ul>

# Position of Caritas Germany on energy poverty (2015)

„Primary services like energy, gas and heating belong to the basic requirements for living and social participation.“

**Social Transfers and support systems are relevant, BUT...:**

- the calculated amount contained in social transfer is not sufficient to cover energy costs  
(PLUS: old devices, lack of information about savings, longer hours at home)
- short-term and high price changes in energy are not considered within the social welfare system
- energy cut-offs have to be avoided, if not terminated
- in case of higher needs (e.g. electrical heating of water or highly inefficient housing conditions) the extra rate paid does on average not pay for the actual higher costs

# Energy Saving Check in Cooperation with Local Authorities – Low-Income Households protect Climate and Environment

- is a nationwide project, that helps people with low income to reduce their energy consumption and to save money through advisory services and installing free energy saving devices
- is a cooperative project of the German Caritas Association (DCV) and the German Federal Association of Energy and Climate Protection Agencies (eaD)
- is part of the National Climate Initiative of the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety
- started in 2008 and now takes place from April 2016 – March 2019 (project phase VII)

Ein Verbundprojekt von:



Gefördert durch:



Bundesministerium  
für Umwelt, Naturschutz,  
Bau und Reaktorsicherheit

aufgrund eines Beschlusses  
des Deutschen Bundestages



# How the Energy-Saving-Project Works



## Application

- The low-income household contacts the local project-site to make an appointment



## 1st appointment

- Check of the equipment
- Check of the bills (if available)
- Assessment of the consumer's behaviour



## Evaluation

- Evaluation of the individual data
- Conception of the recommendation and the report



## 2nd appointment

- Free installation of easy to use energy saving devices. Value: 70 € on average
- Handout report and advice on change in behaviour to further save energy and water
- Delivery of the € 150 voucher for a new A+++ cooling device

# The Energy-Saving-Project and its Four Important Policy Areas

- Financial relief for the households
- Preventing of energy debts
- Savings for the municipalities and the federal government

## Social Impact

Low income households are advised to save energy

## Environment

Energy savings and CO<sub>2</sub> reductions

- CO<sub>2</sub>-reductions per household: 284 kg CO<sub>2</sub>/y (electricity 390 heating 219 kWh)
- Water savings (11,5m<sup>3</sup>)



Qualification and reintegration of long-term unemployed people into the labour market (25%)

## Labour

Unemployed people are qualified to become „energy assistants“

## Education

Investment in climate protection is worth it

Broad distribution of applicable knowledge about energy efficiency and climate protection



# Win-Win-Situation for All Parties (December 31<sup>st</sup>, 2016)

241192 households consulted

Decline of carbon dioxide-emission:  
429,857 t

Savings per household in %: 12 - 15

Annual savings **per household** in €:



99 €

• 389 kWh  
• 231 kg  
CO<sub>2</sub>



41 €

• 11,4 m<sup>3</sup>



11 €

• 216 kWh  
• 51 kg  
CO<sub>2</sub>



151 €

• 283 kg  
CO<sub>2</sub>

# Energy Saving Check Municipal – Fridge Exchange Programme

(State 12/31/16)

Introduced because potential of savings was estimated to double the calculated results ➡ **confirmed**

- 150,- € voucher for low income households to change their old fridge with an A+++ fridge
- Requirements:
  - Old fridge older than ten years
  - The exchange will generate more 200 kWh savings per year
- Results:

Savings/  
households  
/year

372 kWh

94 €

221 kg CO<sub>2</sub>

Long term  
savings for  
all 7.169  
devices

16.172 GWh

4,1 Mio. €

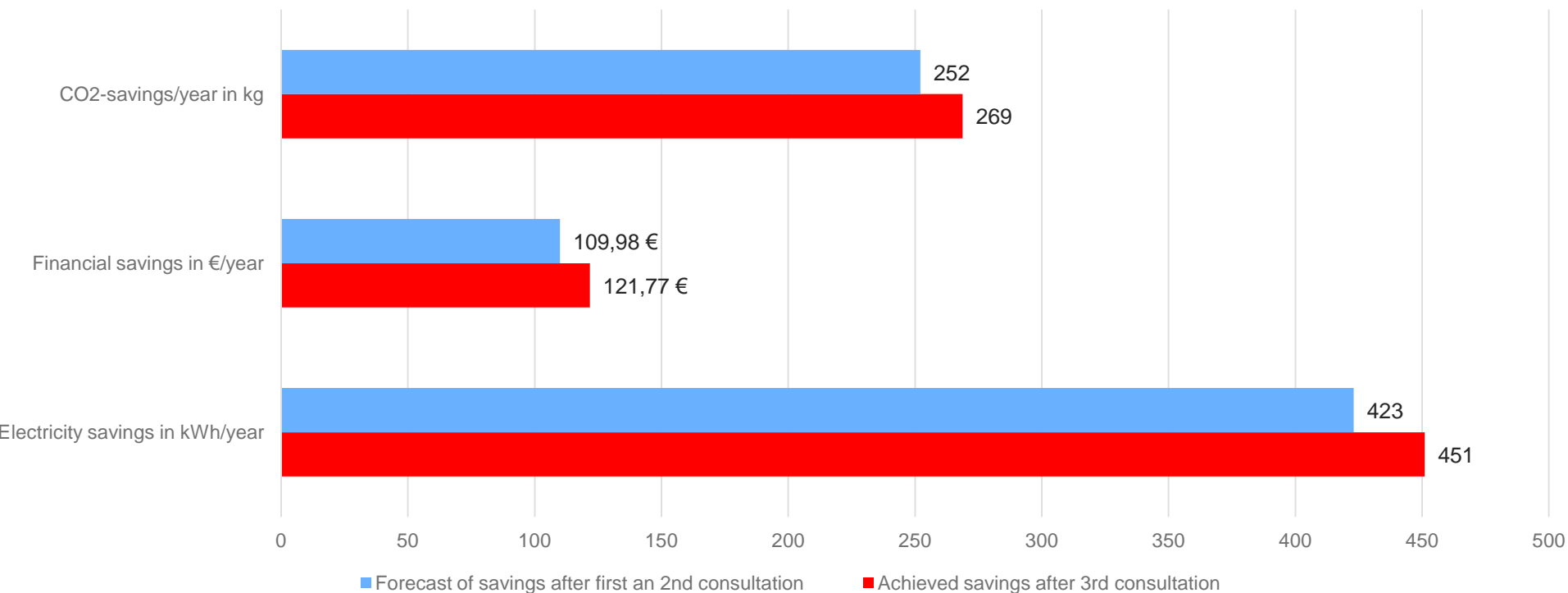
9.638 t CO<sub>2</sub>





# Results Monitoring – Electricity savings (12/31/16)

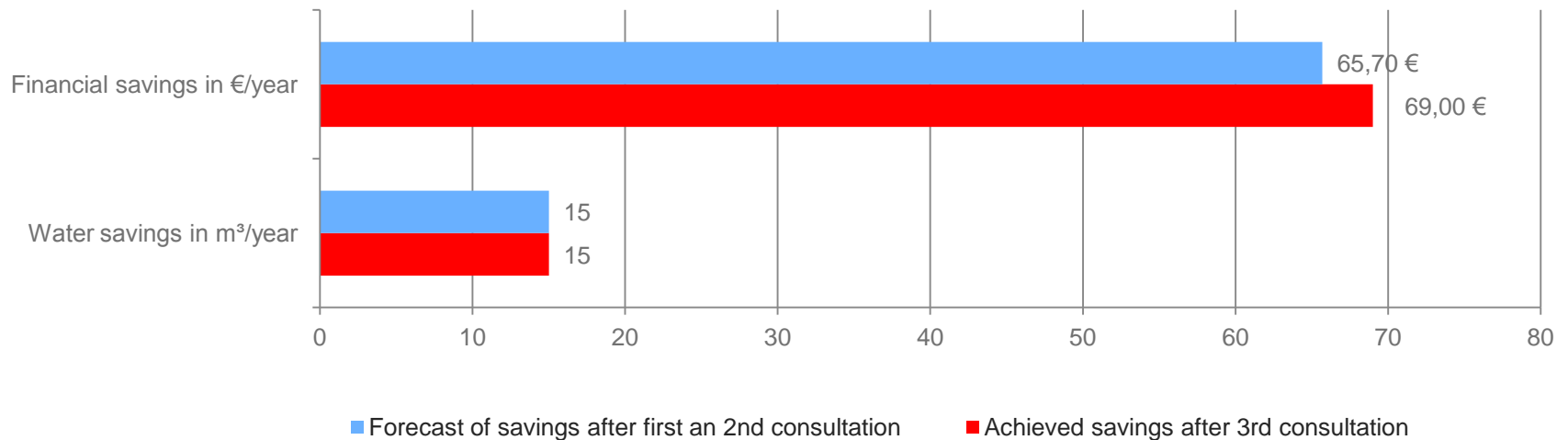
Comparison of forecast and achieved saving after 3rd household visit,  
nationwide (2958 households)



Savings make up **16 %** of the consumption of one year per household  
(average values)

# Results Monitoring – Water savings (12/31/16)

Comparison of forecast and achieved saving after 3rd household visit, nationwide (1035 households)



Savings make up **16 %** of the consumption of one year per household  
(Average values)

# Demands and Conclusions

- **define „Energy Poverty“ to allow better research**  
(the database of more than 240.000 households could serve as a sufficient empirical basis)
- offer cost-free **consulting on energy saving** for all low-income households
- organize **Round Tables** between energy suppliers, job agencies, consumer protectors and welfare associations to avoid power cut offs
- **no cut-offs if certain social indicators apply**,  
(e.g. age, sickness, children, handicaps, pregnancy)
- improve **energy efficiency** (devices and energy efficient housing)
- **reform basic energy supply**  
(e.g. cut offs not below debt of 1.000 €)
- no assignment of **prepaid cards** at higher energy prices



# Thank you for your attention!

For further information visit:

[www.stromspar-check.de](http://www.stromspar-check.de)

**Barbara Kalker**

Regional Coordinator  
Stromspar-Check

**Tel: 0621 – 7628567**

**Mobil: 0177 – 8896464**

**Mail: [info@barbara-kalker.de](mailto:info@barbara-kalker.de)**

