





Webinar Series – Webinar #2 Energy Efficiency for Energy Access Fighting fuel poverty in developed economies

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1. THE REXEL FOUNDATION



The Rexel Foundation for a Better Energy Future: 1 mission focused on 3 programs

1 MISSION

Improving access to energy efficiency for all

COMMUNITY PROJECTS

MM

Improving quality of life for disadvantaged populations

SOCIAL INNOVATION PROJECTS



Driving innovation in energy solutions

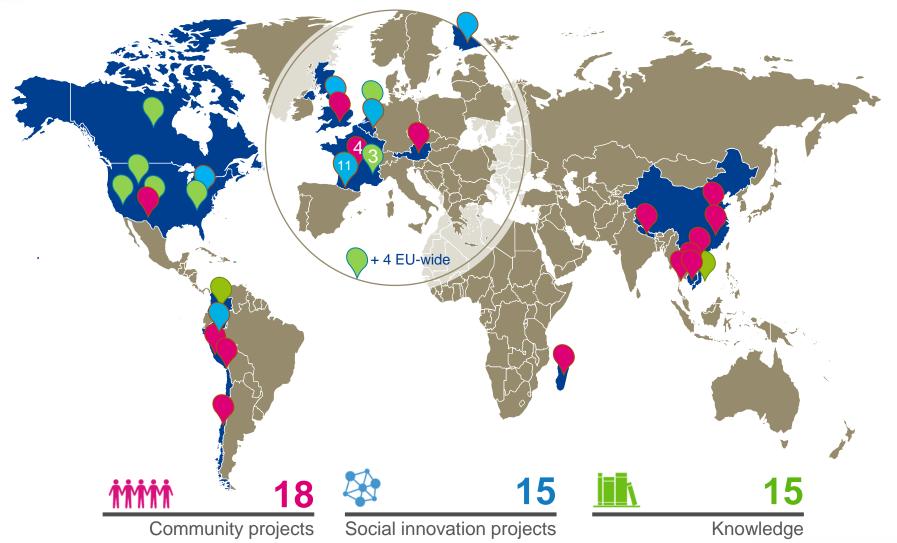




Sharing information and expertise in energy efficiency



48 initiatives deployed by the Foundation across the world since 2013







Working in partnership with more than 45 organizations

Business partners:









ivoveha





Foundations:











 Θ

Social enterprises:

















SOLARFIRE





LATIMPACT







Non-profit organizations:



Entreprise

& Pauvreté

Tank











9



Academic partners:



15

10























The type of support provided depends on the "energy maturity" of the country











A

Promoting & financing renewable energy









Encouraging the **retrofit** of buildings & cities to improve **energy efficiency**







Empowering and improving the lives of low-income households and reducing **fuel poverty**



Providing humanitarian aid and emergency deployment of lighting solutions



Providing efficient & renewable energy services in rural areas, and non-electrified zones







Promoting and financing renewable energy







Helping grassroots organizations to develop their own sustainable energy generation projects.







Providing access to energy through solar solutions.









RMI is working to **design** and **demonstrate** an affordable model based on a community solar system, a collaborative & "citizen" project.

Key figures

The Lucisol project generates **250** MWh/year, equal to the energy consumption of approx.**100** households and achieving savings of 32 tons of CO₂ eq/year.

Aims at providing access to energy for **1000** native Americans directly & **12** tribal communities indirectly.

Increasing solar energy access by **700** times for low and moderate income communities.







Encouraging the retrofit of buildings and cities to improve energy efficiency









Providing training in the energy retrofit of single-family homes.







EcoBlock is an applied research program centered on city retrofitting.

Key figures

Aims at renovating up to **1,500 homes** per year in a comprehensive, effective and cost-efficient way.

Pilot block of **28 buildings** running on an autonomous PV system with potential replicability to millions of US buildings.







Empowering and improving the lives of low-income households and reducing fuel poverty







Development of an energy retrofit model targeting deteriorated shared housing while involving target communities as well as a panel of stakeholders.







Training of "energy advisors", animation of "energy pop-up shops" and workshops around "housing insulation" or "energy efficiency solutions" and distribution of "energy packs".

Key figures

Aims at applying the model to a further **100 000** shared housing blocks in a similar condition in France

Aims at training **600** energy advisors and distribute energy packs





2. WHY IS ENERGY EFFICIENCY CRITICAL IN FIGHTING FUEL POVERTY?



What are we talking about?

Energy efficiency definition

"Energy efficiency is a way of managing and restraining the growth in energy consumption.

Something is more **energy efficient** if it delivers more services for the same energy input, or the same services for less energy input."

Rexel foundatien



What are we talking about?

Fuel poverty definition

No single definition of fuel poverty worldwide



- "A household is said to be fuel poor if it needs to spend more than 10% of its income on fuel to maintain an adequate level of warmth" (1991)
- "Households are fuel poor if they have required fuel costs that are above average (the national median level) and were they to spend that amount, they would be left with a residual income below the official poverty line" (2013)



Anyone who faces difficulties in accessing the energy they need to meet their basic needs, whether due to limited financial resources or poor housing conditions, is considered to be fuel poor (2010)





"Fuel poverty has been described as the inability to afford adequate warmth in a home, or the inability to achieve adequate warmth because of the energy inefficiency of the home" (2007)

Source: BPIE (2014), Fuel poverty mitigation through energy efficiency in buildings



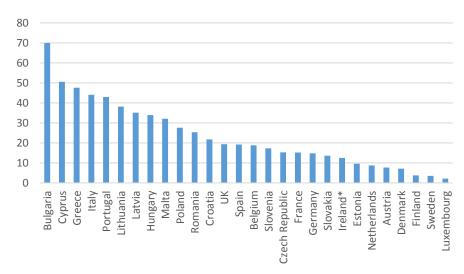


Fuel poverty prevalence in Europe

A major issue

An issue affecting a large percentage of low income households

50-125 million people are unable to afford a proper indoor thermal comfort



Percentage of people at risk of poverty and affected by fuel poverty (inability to keep home adequately warm)

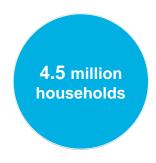
Source: BPIE (2014), Fuel poverty mitigation through energy efficiency in buildings





Fuel poverty prevalence in the UK and in France

An urgent issue even in economically mature countries...



live in fuel poverty in the UK, representing



of all UK households

...majorly affecting lower income households

In France, of the 25% lowest income households



of them spend more than 10% of their income on energy







Consequences of fuel poverty



Physical health risks and impact



Mental health risks and impact



Reduction in purchasing power



Degradation of housing



Excessive debt



CO₂ emissions

Source: European Fuel Poverty and Energy Efficiency (EPEE)





Energy efficiency is key to reducing fuel poverty

Key drivers Key of fuel solutions for fuel poverty poverty Insulation (passive energy efficiency) Energy price Energy regulations price Mainly short Increase in term Household income / income support Equipment upgrades Energy Quality of (passive + active Long efficiency energy efficiency) housing term improvement

Sources: UK government / BPIE - Buildings Performance Institute Europe





Key difficulties in addressing fuel poverty in developed economies



Large number of people affected



Many variables to consider



Lack of data



Lack of coordination between all actors involved





3. CASE STUDIES IN DEVELOPED ECONOMIES



A. Rexel & Caritas taking action against fuel poverty in Austria

200,000 to 300,000 people in Austria live in fuel poverty today

CaritasAustria



Extensive knowledge of local needs





- Technical / product skills
 - Logistics organization





A. Rexel & Caritas taking action against fuel poverty in Austria

2 key actions have been developed as part of this program

1

Energy efficient domestic appliance replacement

2

Energy Audits and consulting conducted by Rexel employees in the homes of people in need

A project that is currently being replicated throughout Austria







B. Rexel and Soleni in France

ULISSE ÉNERGIE SOLENI



Customized service to low income households





- Skill-based sponsorship
- Support in impact assessment





B. Rexel and Soleni in France

Energy providers





Local authorities





FINANCE





Social housing organizations





ULISSE ÉNERGIE **SOLENI**

HIRES & TRAINS



...people to help them get back into the job market and become experts in energy efficiency





PROVIDES

...a customized service for lowincome households





Fuel poverty



Energy efficiency







Thank you

Webinar #3 planned in June 2016

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