Webinar Series – Webinar #2

Energy Efficiency for Energy Access

Fighting fuel poverty in developed economies

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Agenda

1. The Rexel Foundation
2. Why is Energy Efficiency critical in fighting fuel poverty?
3. Case studies in developed countries
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
Improving quality of life for disadvantaged populations

SOCIAL INNOVATION PROJECTS
Driving innovation in energy solutions

KNOWLEDGE
Sharing information and expertise in energy efficiency
48 initiatives deployed by the Foundation across the world since 2013

- Community projects: 18
- Social innovation projects: 15
- Knowledge: 15

+ 4 EU-wide
Working in partnership with more than 45 organizations

Business partners:
- OSRAM
- Hager
- Schneider Electric
- OpinionWay
- Faurecia
- Inovoha
- Rexel
- BizLine

Foundations:
- Fondation d’entreprise Deloitte
- FACE
- Le Grand
- United Nations Foundation
- Schneider Foundation

Non-profit organizations:
- Action Tank
- Entreprise & Pauvrety
- Carbon
- Mac Roon
- Technical
- Ashoka
- All for Us
- Planète

Social enterprises:
- ABAC Web
- Microlit
- ENERGIE PARTAGEE
- Aquitaine
- Power On
- INSTITUT LATIMPACT
- SOLARFIRE
- Energy Sussex Coast
- 7 Vents
- EUROPE TOMORROW
- Éol École
- LA TECHNIQUE LUDIQUE

Academic partners:
- HEC Paris
- ESSEC Business School
- ESTP
- ESSEC
- Yale University

The Rexel Foundation website: www.rexelfoundation.com
The type of support provided depends on the “energy maturity” of the country.

A. Promoting & financing renewable energy

B. Encouraging the retrofit of buildings & cities to improve energy efficiency

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

- Providing humanitarian aid and emergency deployment of lighting solutions
- Supporting the vocational training of electricians
- 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?
“**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.”

Source: International Energy Agency
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)
• “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)
• 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)

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

A major issue

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

An issue affecting a large percentage of low income households

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...

4.5 million households live in fuel poverty in the UK, representing 9% of all UK households.

In France, of the 25% lowest income households, 48% 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 of fuel poverty**
- Energy price
- Household income
- Quality of housing

**Key solutions for fuel poverty**
- Energy price regulations
- Increase in income / support
- Energy efficiency 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

Sources: UK government / Institut du développement durable et des relations internationales (IDDRI) – SciencesPo
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

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

Pilot 2015
B. Rexel and Soleni in France

- Customized service to low income households
- Skill-based sponsorship
- Support in impact assessment
B. Rexel and Soleni in France

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

PROVIDES
...a customized service for low-income households

Fuel poverty

Energy efficiency

ULISSE ÉNERGIE
SOLENI

Energy providers
- EDF
- GEG

Local authorities
- Isère Conseil Général
- Saint-Egrève
- Grenoble

Social housing organizations
- SDH
- ODIT

FINANCE

Energy providers
Local authorities
Social housing organizations
Thank you

Webinar #3 planned in June 2016

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