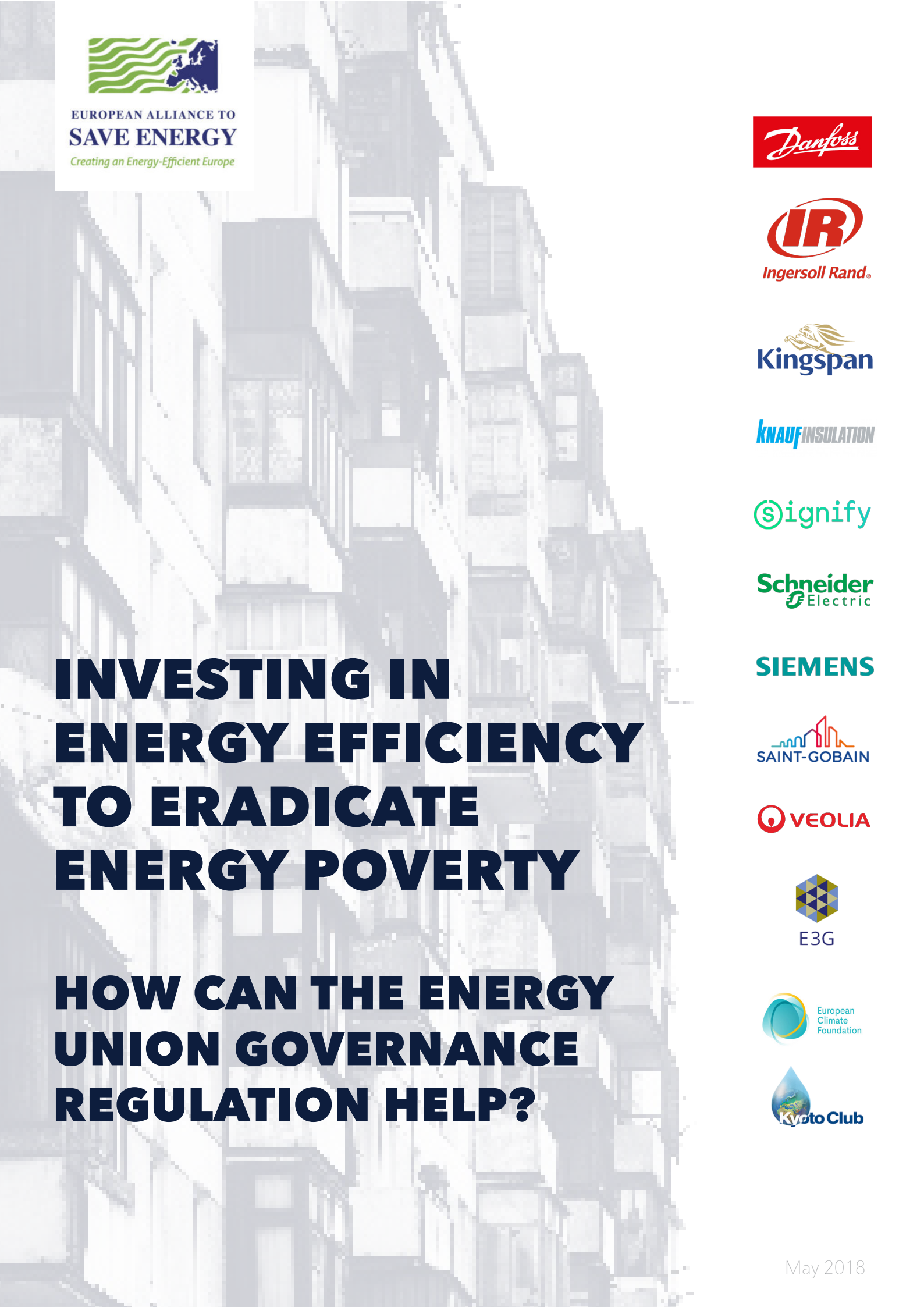

EUROPEAN ALLIANCE TO
SAVE ENERGY
Creating an Energy-Efficient Europe

INVESTING IN ENERGY EFFICIENCY TO ERADICATE ENERGY POVERTY

HOW CAN THE ENERGY UNION GOVERNANCE REGULATION HELP?

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European Climate Foundation

Kyoto Club

May 2018

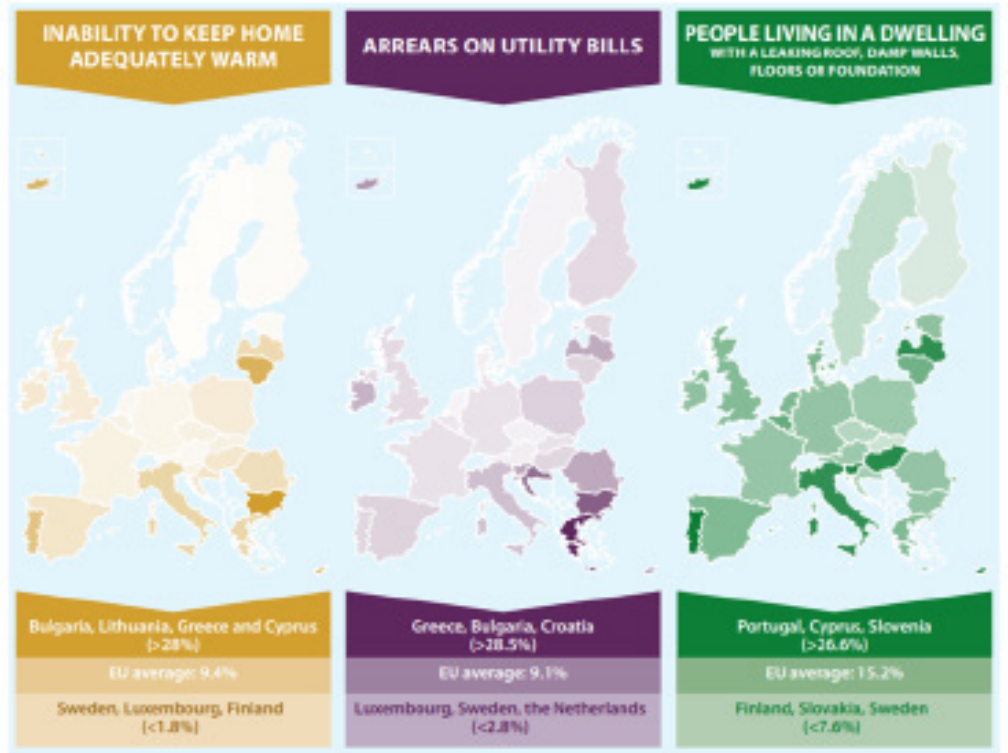
EFFICIENCY FIRST

"Energy Efficiency First" is a principle that has gained growing visibility in European energy and climate policies and is of central importance in removing energy inefficiency as a major and persistent cause of energy poverty. Energy Efficiency First should be a pillar of the Energy Union. It means considering the potential for energy efficiency solutions in all decisions related to energy planning and investment. Concretely, it is about systematically comparing the cost-effectiveness and the added value of energy efficiency measures and energy supply solutions (considering also the externalities such as jobs and economic growth, energy security and climate change mitigation objectives). It boils down to making an informed choice to optimally invest tax-payers' money and prioritize energy efficiency investments whenever they deliver more benefits.[1]

Therefore, energy efficiency should be recognized as an energy resource and compete on equal footing with other supply side resources.[2]

The Efficiency First concept has been championed by the Commissioners in charge of the Energy Union and further operationalized in proposed amendments to the legislative framework, including the Governance of the Energy Union Regulation, the Energy Performance of Buildings Directive, the Energy Efficiency Directive and the Market Design files. One of the main goals of this legislative framework is to improve the energy performance of the EU building stock to deliver energy and cost savings for all, contributing to enhanced competitiveness for businesses and a fair deal for citizens.

ENERGY POVERTY



As shown above[3], energy poverty is a genuine challenge for the European Union:

- With real energy prices up by 70%[4] since 2004, energy is becoming a luxury item across the European Union, where 75% of the current building stock has no or very weak energy performance requirements.

- In 2016 alone, roughly 50 million Europeans were unable to keep their home warm; this means 1 European out of 10.[5] In some countries the situation is much worse, for example in Bulgaria where 46.5% of people are unable to keep their homes adequately warm in winter.

- Similar numbers were reported with regard to the late payment of utility bills or presence of poor housing conditions. Indeed, more than a third of the Greek population (35%) says they struggle to keep up with their payments. According to Eurostat, many Bulgarians (34%), Croatians (30%) and Romanians (29%) are also in arrears on their utility bills.

ENERGY EFFICIENCY POLICIES CAN LOWER ENERGY BILLS

According to the UK's climate change agency, the average impact of residential energy efficiency policies introduced since 2004 is estimated to be a saving for households of around 30% (£500 / €566) in 2017, compared to what they would pay as bills in 2017 if these policies had never been introduced[6]. Statistics showed that with those policies an average household is using around 29% less gas and 22% less electricity than in 2004[7].

Also in countries like Germany and France, thanks to energy efficiency improvements, household energy bills were cut by an average of €330 per capita between 2000 and 2016[8].

The reduction of energy bills is not the only benefit of renovating energy poor homes. Even if energy costs are kept at the same level, the inhabitants gain significantly in terms of having a higher indoor thermal comfort and thus avoiding associated illness and resulting healthcare costs due to low indoor temperatures.[9,10,11]

ENERGY EFFICIENCY FIRST, ENERGY POVERTY AND THE GOVERNANCE OF THE ENERGY UNION REGULATION

The first step to address energy inefficiency as a major and persistent cause of energy poverty is to integrate the Energy Efficiency First principle in the Governance of the Energy Union Regulation. The Regulation aims to set out the monitoring mechanisms that allow for a swift and ambitious implementation of energy efficiency, renewables and climate targets.

The integrated approach adopted in the National Energy and Climate Plans (NECPs) is an opportunity to make Energy Efficiency First a reality. These plans should be based upon projections of energy demand up to 2030 and 2050, in line with the most ambitious energy efficiency scenarios. There should be systematic consumer-centric value-for-money comparisons of all infrastructure projects that add new energy supply onto the market against demand-side and energy efficiency project alternatives. This systematic comparison and evaluation means that tax-payers' money will always be invested in the most cost effective manner.

For it to happen, the Governance Regulation needs to include a definition of Efficiency First as well as define and attribute specific power to the European Commission so that it can systematically evaluate the correct application of the principle.

Efficiency First in the Governance Regulation is indeed essential to alleviate energy poverty because it will change the way we plan energy investments and reduce the risk to invest in stranded and polluting assets, for which the consumers often end up paying through their energy bill. Efficiency First will reduce total energy system costs and enable EU citizens to adequately heat and cool their homes.

ANNEX

Energy Efficiency projects tackling energy poverty in support of the most vulnerable consumers

The following is a useful overview of six concrete projects showing that investing in energy efficiency is a cost-effective way to combat energy poverty. They address energy poverty through various means ranging from how to use smart meters and innovative investment schemes to training energy ambassadors and advisors and promoting energy saving behaviour.

AFTER is a projects which involved Social Housing Organisations (SHOs). AFTER, which ran in France, Slovenia, Italy, Denmark, Czech Republic and Germany, made a classification of energy saving measures and methods for integration in the asset/facility management of SHOs. At the end of the project measures were implemented in over 820 dwellings, contributing to almost 500 toe/yr of energy savings and resulting in methods and guidance readily available for uptake and replication by SHOs across Europe.

SHINE - The Seasonal Health Interventions Network aims to reduce energy poverty and associated health problems through extensive partnership working between the public, private and third sectors. It does this by delivering up to 30 seasonal health interventions through a single referral. The network is one of the largest programme of its kind in the UK, being comprised of 90 organizations operating in Islington, has assisted almost 9,500 households and saved £2.2 million on energy bills alone.

ENERGY LOCAL helps communities save money and carbon while managing their own energy generation and use. Energy Local has been set up to develop new systems so communities can benefit from pooling and using their own generation directly rather than selling it at a loss. It also lets them buy power for less at cheaper times of day. This is done using new relationships with energy suppliers, smart meters and technology to give communities a helping hand in how you use power.

LEMON - Less Energy More OpportuNities focuses on energy investments in the Social Housing sector and involves two Housing Companies of Emilia Romagna Region in Italy, launching 15,29 M€ of energy investments in 622 private and public social housing dwellings to achieve 40% energy savings guaranteed by ESCOs. The project aims to lead to 5,74 GWh primary energy saved and 1.159 t CO2 emissions avoided for the social housing sector within its end.

REACH addresses energy poverty by training teachers and students in vocational schools to became energy advisors. In this way, they gain experience and knowledge on energy efficiency, which could become part of the school curriculum. In cooperation with social actors who help to identify the energy poor households, energy advisors will carry out 1600 home visits and distribute tailor-made advice, energy saving device kits, guidebooks and post-visit support to energy poor households. It is expected that REACH will achieve energy savings of nearly 300 toe/year. The project is running in Bulgaria, Croatia, Slovenia and the former Yugoslav Republic of Macedonia.

SAMENLEVINGSOPBOUW is a project destined to people with debts suffering from fuel poverty in Belgium. Because of these debts, they cannot replace their old consuming appliances for energy saving ones and they continue to have expensive energy bills. Samenlevingsopbouw is a lease/rent system where people can rent energy saving appliances and reduce their energy bill. This innovative project is a smart and replicable mean to give access to efficient appliances to people who could not afford them beforehand.

FOOTNOTES

[1] Putting Energy Efficiency First – Reframing EIB action in times of transition and uncertainty (2015), CEE bankwatch network, at https://bankwatch.org/sites/default/files/energyefficiencyfirst-EIB.pdf

[2]The IEA called energy efficiency the "first fuel" in 2013. It showed that energy savings from efficiency measures exceeded the output of every other fuel in 11 IEA countries from 1974-2010;

[3]BPIE own analysis based on 2015 Eurostat data

[4]Walker, Thompson, Liddell, (2013), University of Ulster and University of York

[5]EU Survey on Income and Living Conditions, at http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_mdho01&lang=en

[6]Committee on Climate Change (2017). Energy Prices and Bills 2017: charts and data. Available at https://www.theccc.org.uk/publication/energy-prices-and-bills-report-2017/

[7]BEIS (2017). Energy Consumption in the UK 2017. Available at https://www.gov.uk/government/statistics/energy-consumption-in-the-uk

[8]IEA (2018). Energy Efficiency Report, Retrieved from: http://www.iea.org/publications/freepublications/publication/Energy_Efficiency_2017.pdf

[9]BPIE (2011). "Europe's buildings under the microscope." Available at: http://bpie.eu/eu_buildings_under_microscope.html#.U2uDUrZBurQ

[10]Copenhagen Economics (2012). "Multiple benefits of investing in energy efficient renovation of buildings. Impact on Public Finances". A study commissioned by Renovate Europe. Available at: http://www.renovate-europe.eu/uploads/Multiple%20benefits%20of%20EE%20renovations%20 in%20buildings%20-%20Report%20only.pdf

[11]International Energy Agency (2009). "Ensuring Green Growth in a Time of Economic Crisis: The Role of Energy Technology." Report for the G8 meeting, Siracusa, Italy 22-24 April 2009. Available at: https://www.iea.org/publications/freepublications/publication/ ensuring_green_growth.pdf

ABOUT THE EUROPEAN ALLIANCE TO SAVE ENERGY

EU-ASE was established in December 2010 by some of Europe's leading multinational companies.

The Alliance creates a platform from which our companies (Danfoss, Ingersoll Rand, Kingspan, Knauf Insulation, Philips Lighting, Schneider Electric, Saint-Gobain, Siemens and Veolia) can join with politicians and thought leaders to ensure the voice of energy efficiency is heard from across the business and political community.

EU-ASE members have operations across the 28 Member States of the European Union, employ over 340.000 people in Europe and have an aggregated annual turnover of €115 billion.

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