

EIB-Geld für Waldviertler Energieprojekte?

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ManagEnergy Expert Mission
to **Energieagentur der Regionen**, 19-21 September 2018



ManagEnergy

Energy Agencies leading the energy transition



REGIONALNA ENERGETSKA AGENCIJA
NORTH-WEST CROATIA
SJEVEROZAPADNE HRVATSKE
REGIONAL ENERGY AGENCY





Covenant of Mayors for Climate & Energy



Welche Geschichte erzählen?

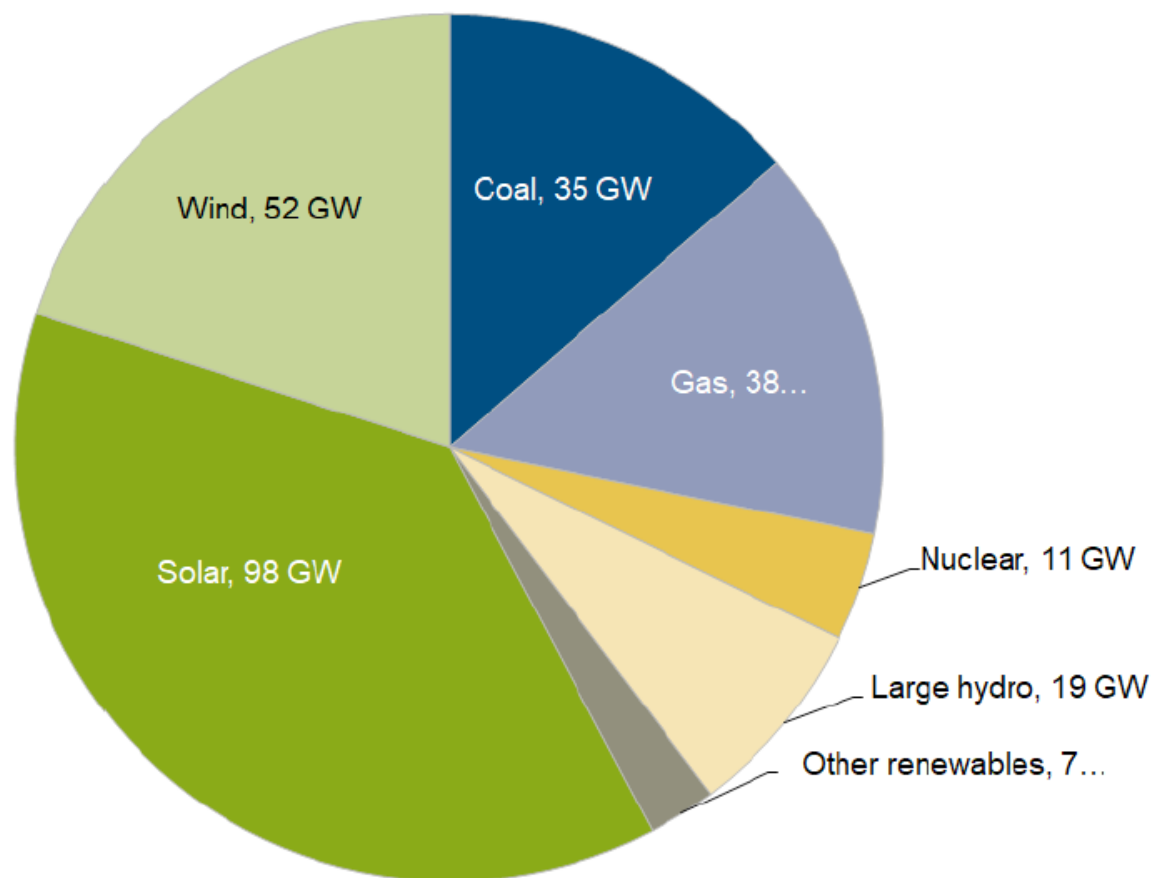






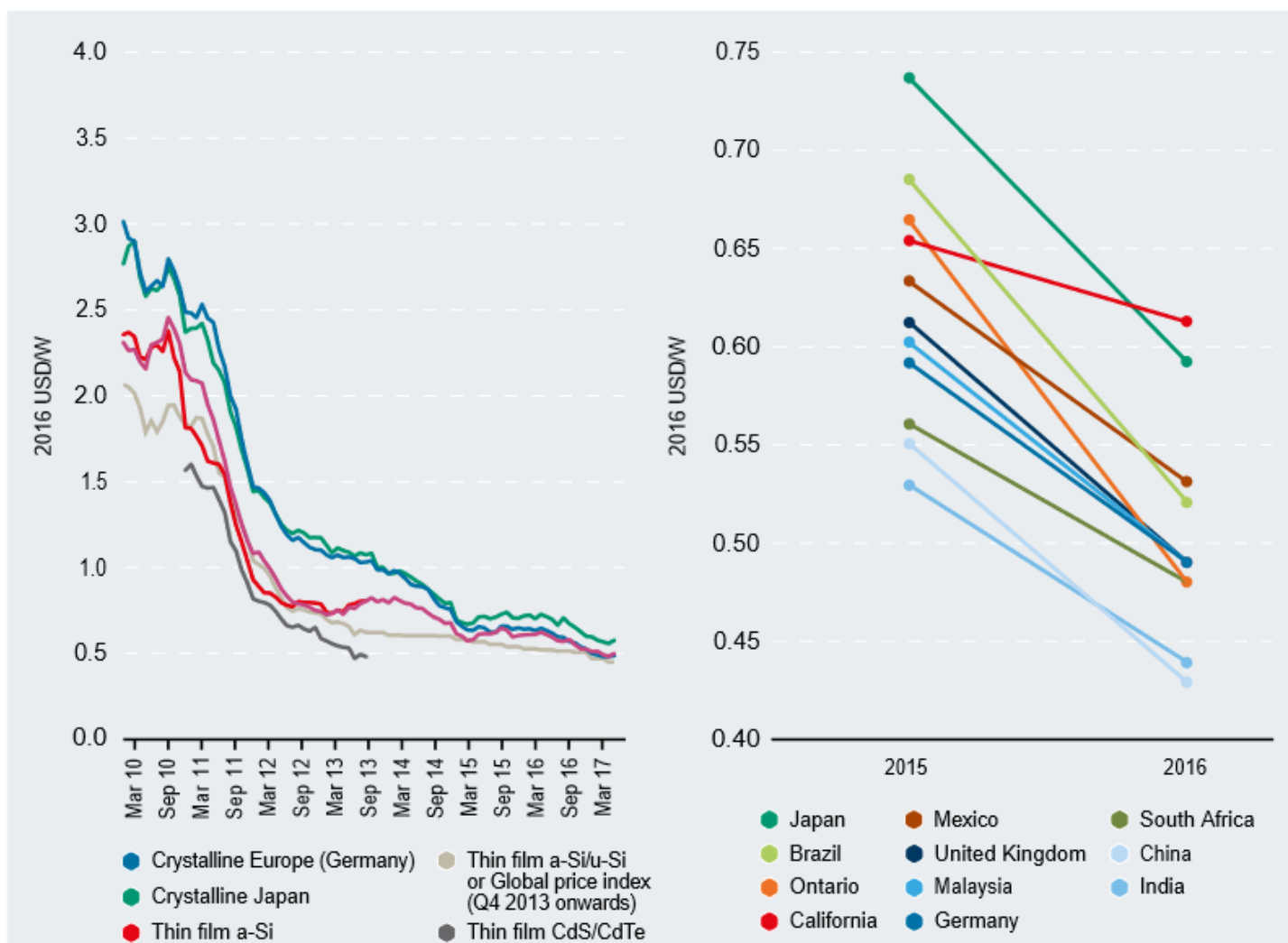
**Some good and
some bad news...**

**FIGURE 24. NET POWER GENERATING CAPACITY ADDED IN 2017
BY MAIN TECHNOLOGY, GW**



The chart does not show the negative addition of 3GW from oil-fired capacity
Source: UN Environment, Bloomberg New Energy Finance

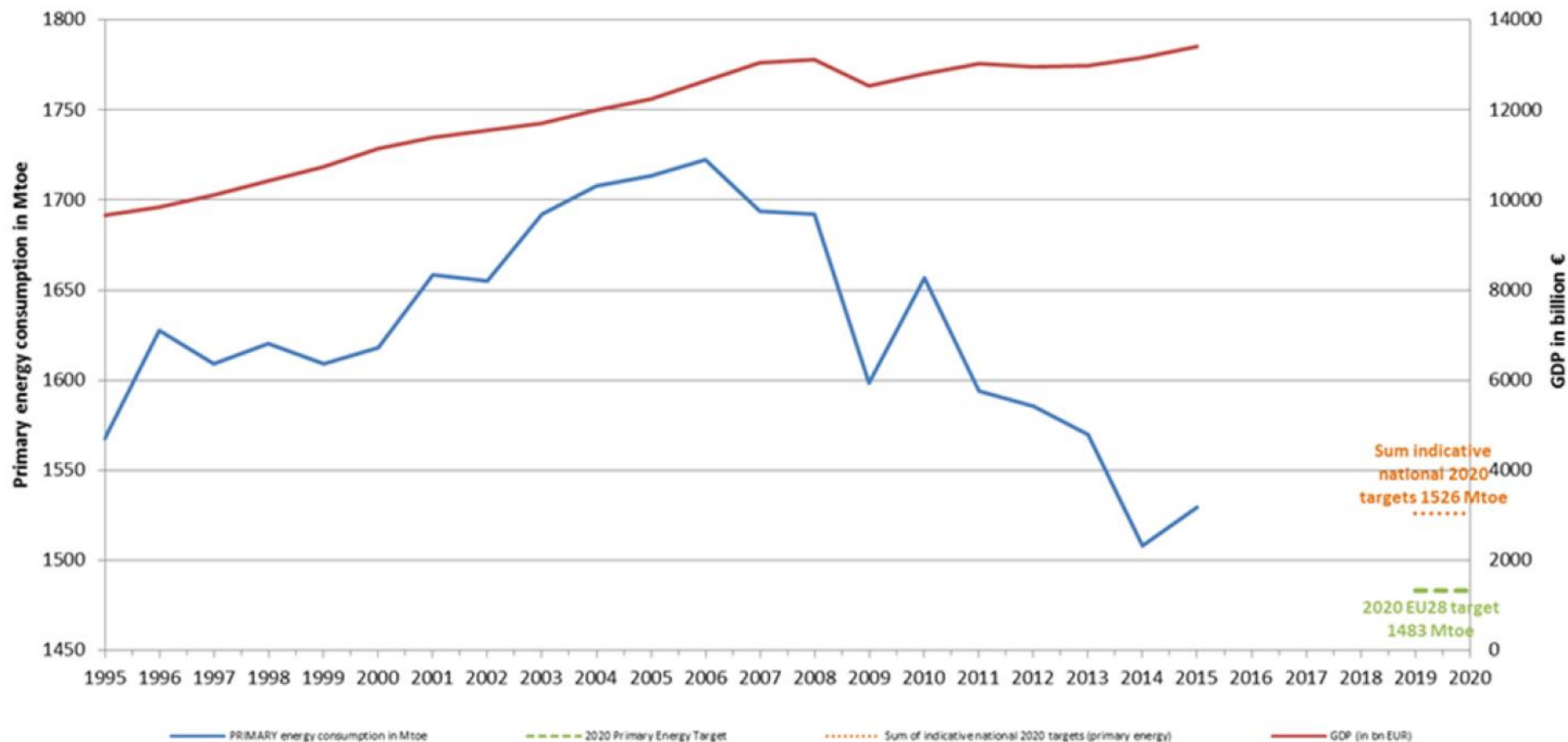
Average monthly European solar PV module prices by module technology and manufacturer, March 2010—May 2017 (left) and average yearly module prices by market in 2015 and 2016 (right)



4Q 2018: 0.24 US\$/W!



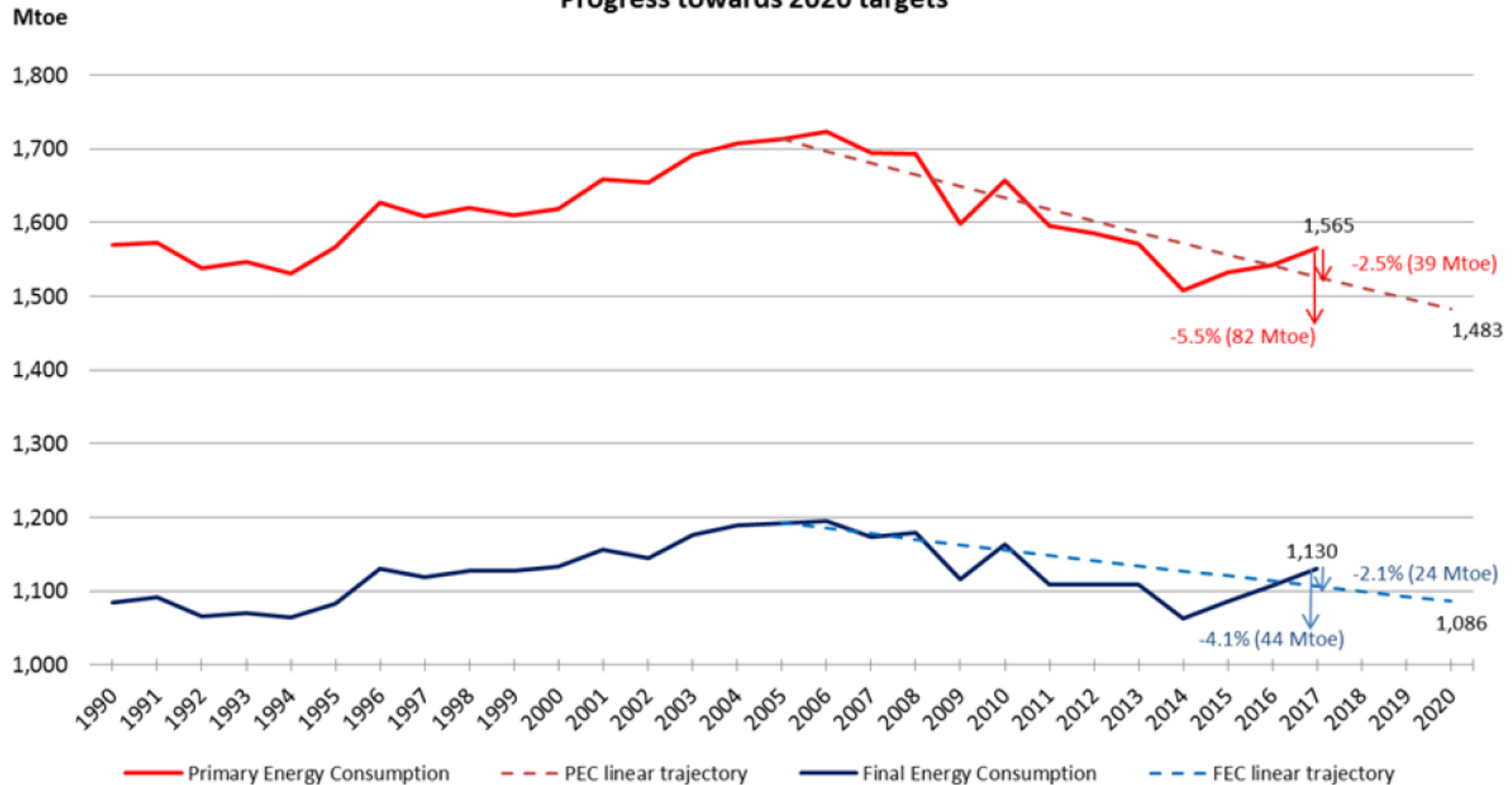
EU 28 - Primary energy consumption and GDP



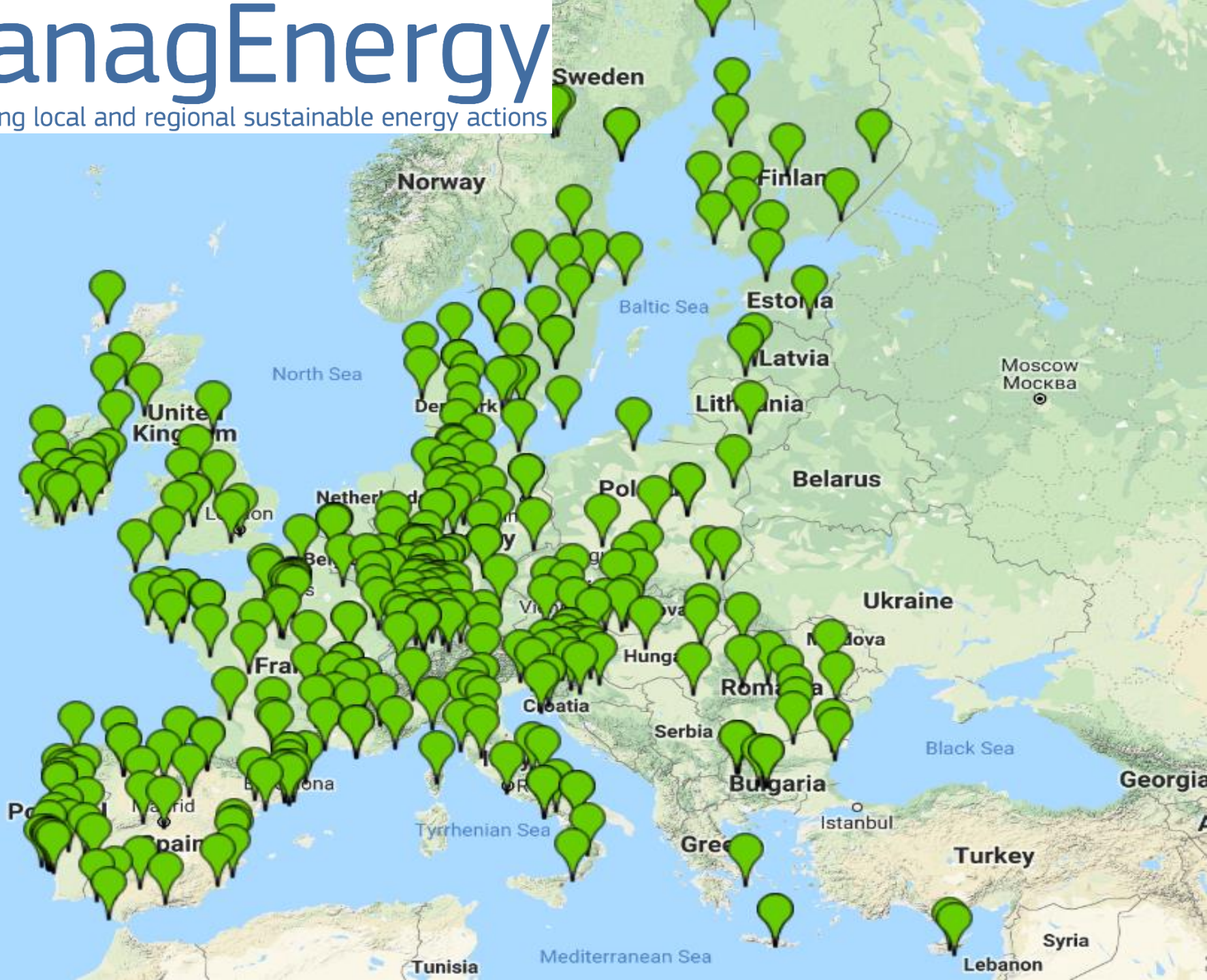
De-coupling is possible!!!



Progress towards 2020 targets

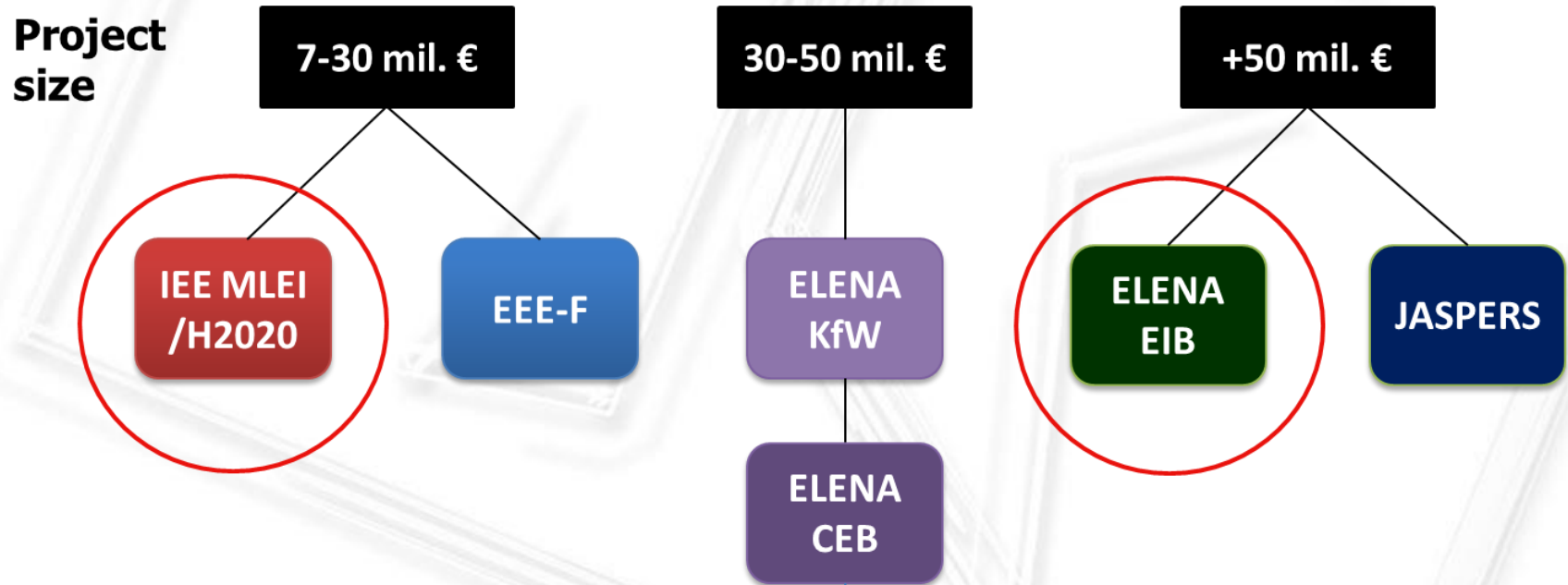


Supporting local and regional sustainable energy actions



EU PDA programmes

- Innovative financing schemes and programmes developed thanks to the EU project development assistance programmes
- PDA assists public authorities to prepare, mobilise and launch investments in EE and RES and to bridge the gap between planning and implementation of bankable actions



INVESTITOR: GRAD ZAGREB, Zagreb, Trg Stjepana Radića 1

PROJEKTANT: PRIMA PARS d.o.o., Gojłanska 35

IZVOĐAČ RADOVA: HM-PATRIA d.o.o., Zagreb, Oboj 47

STRUČNI NADZOR: M.G. PLAN d.o.o., SESVETE, Industrijska cesta 18

UGOVOR: ENERGETSKA OBNOVA ZGRADE OŠ NIKOLA TESLA
Matetićeva 67, Zagreb, br. 276/2017.



IEE - MLEI
Mobilising Local Energy Investments



Co-funded by the Intelligent Energy Europe
Programme of the European Union



FOND ZA ZAŠTITU OKOLIŠA
I ENERGETSKU EFIKASNOST

Project Zagreb Energy Efficient City (ZagEE)

Key financial figures:

- Total investment size: 29,3 mil. €
 - Refurbishment of public buildings: 26,5 mil. €
 - Modernization of public lighting: 2,8 mil. €
- PDA grant: 1,81 mil. €
- Leverage factor (investment/grant ratio): 16,2

Key technical figures:

- Average energy savings: 49% (buildings), 72% (public lighting)
- RES generation: 290 MWh/year



Mobilising European Citizens to Invest in Sustainable Energy – REScoop MECISE

- Project partners: 6 renewable energy cooperatives (REScoops) from 4 different EU Member States (BE, ES, UK, FR)
- Aim: at least 30 mln EUR investment in RES projects (wind, PV, biomass, hydro) and energy efficiency.
- Engaging citizens, cooperating with local authorities, finding



Achievements so far:

- ✓ *REScoop-municipality approach*: co-investment of REScoops and local authorities
- ✓ *Ecotraject*: cost-covering assistance to citizens with deep energy home renovations
- ✓ *European Cooperative Society*: tool for aggregating funds from cooperatives, municipalities, and institutional investors, allowing citizens to take ownership in local RES and EE projects
- ✓ over EUR 30m investment mainly in RES but also EE (e.g. "Klimaatscholen 2050" targeting ca. 1500 school buildings in BE)

ELENA in short

European Local Energy Assistance

- EC-EIB cooperation to support public authorities and private entities to reach 20-20-20 targets
- Technical Assistance facility: managed by EIB; funded by EU budget (H2020 Programme)
- Project development support for energy efficiency; building integrated renewables; clean urban transport
- Market replication focus (min. investment EUR 30 m)
- Investment leverage required (ratio 20 for sustainable energy; 10 for clean urban transport; claw back possibility)
- 90% funding rate (grant)
- Budget allocation: still available; average EUR 15m per year
- First come, first served rule

European Local Energy Assistance - ELENA

ELENA

Technical Assistance

Support for
local or regional entities for :

- **Additional personnel**
- **Technical studies**
- **Preparation of calls for tender**
- **Financial structuring**

INVESTMENT PROGRAMME EE and RE

in public and private buildings;
public lighting and traffic light network;
photovoltaics,
heating/cooling systems;

Efficient urban transport

clean and energy-efficient road transport vehicles,
trams, trolleybuses, metros, and trains;
investments to improve public transport;

Local energy facilities that support EE/RE

smart grids;
infrastructure for recharging electrically
powered vehicles;
information and communications technologies.

Project example: EFSI and ELENA

PICARDIE REGION “Picardie Pass Rénovation”

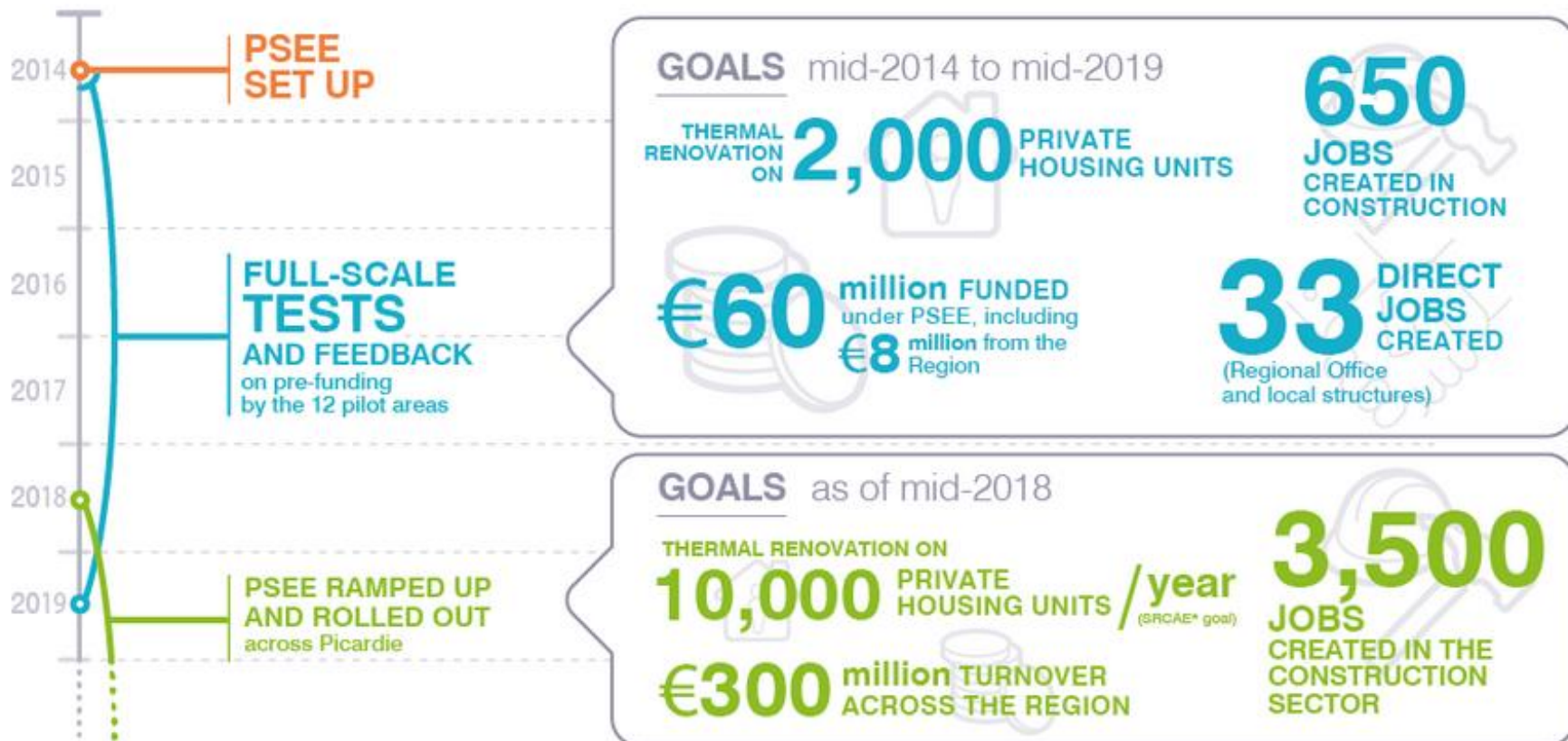
- Picardie Region received a loan of EUR 25 million and also has an ongoing ELENA technical assistance programme
- The works mainly consist of improving the insulation of the private housing - renovation of the buildings' heat generation and distribution system, including ventilation systems, small scale wood-fired boilers or solar thermal collectors
- ELENA supports dedicated service to assist homeowners in the implementation of EE measures with initial advice, energy audit, defining the optimal set of EE measures and setting up of financing through the service (one stop shop)
- As of December 2016, 290 ongoing building sites provide work to more than 400 local craftsmen and companies with EUR 26.3m.
- Elena grant budget: EUR 1.8m for additional staff and external expertise and support



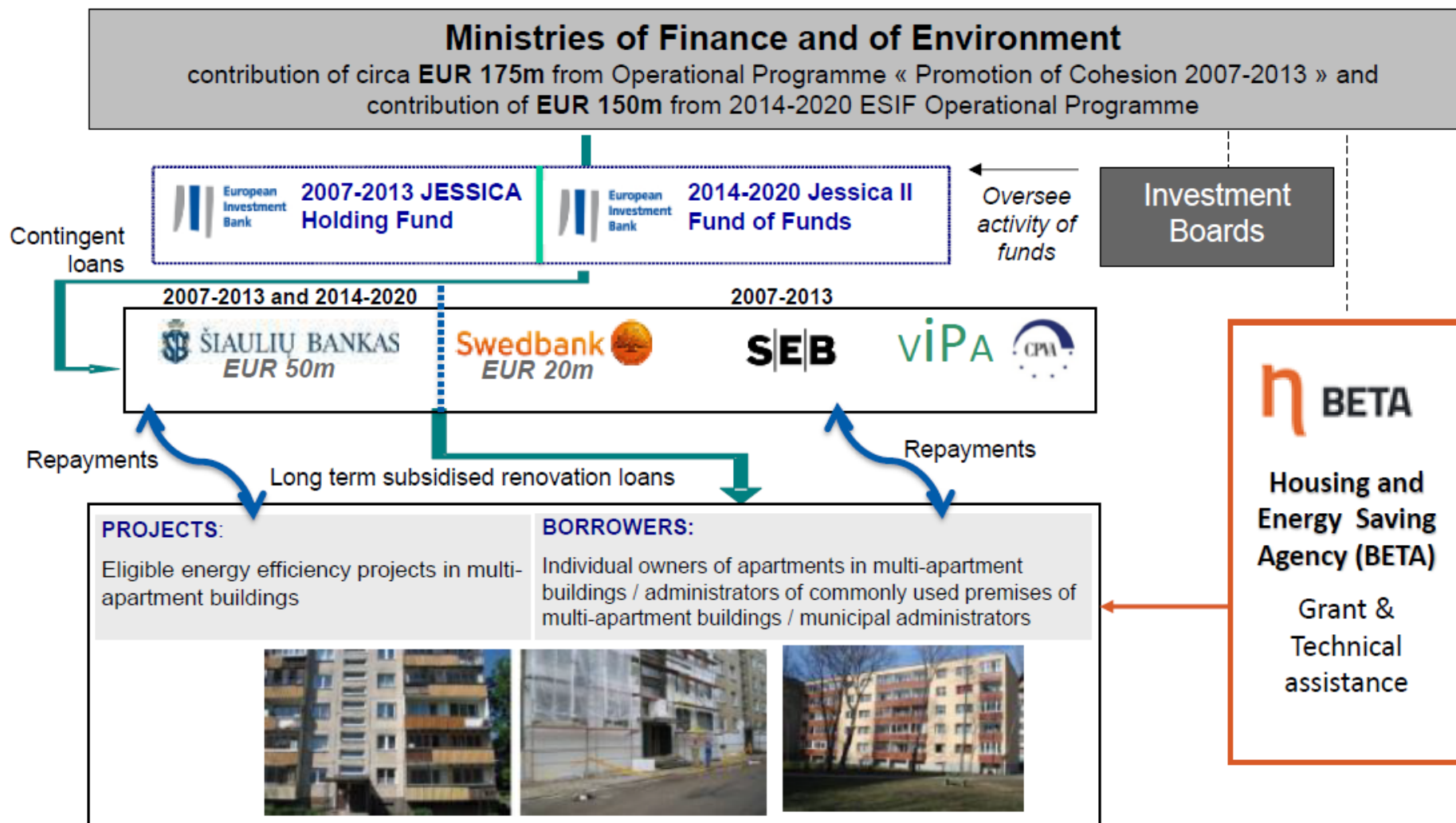
http://www.eib.org/attachments/documents/picardie_pass_renovation_factsheet_en.pdf

Picardie Pass Renovation - targets

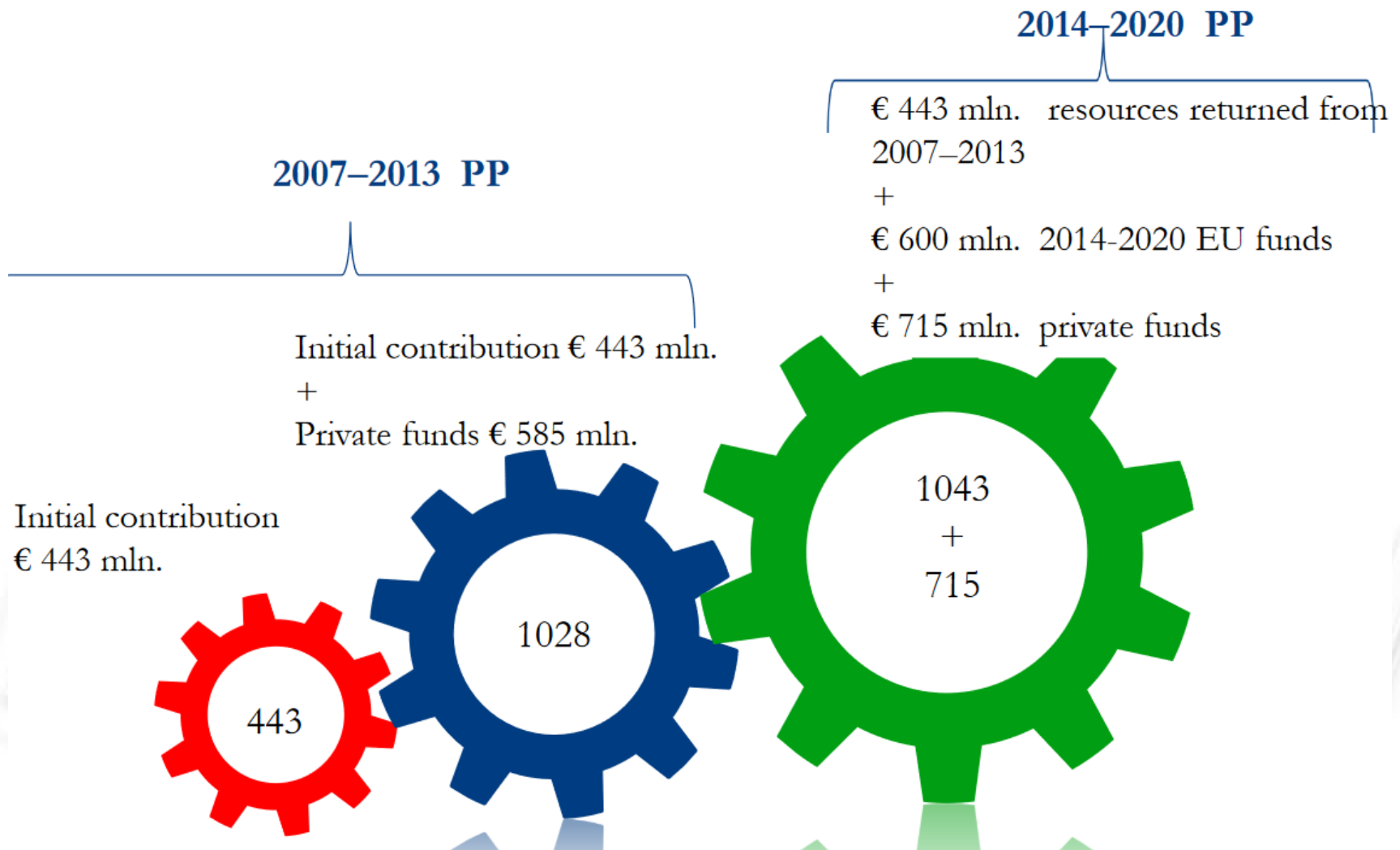
A PILOT PHASE CONCERNING 53 LOCAL AUTHORITIES



ESIF – EFSI project: Lithuanian case study



JESSICA Holding Fund Lithuania – snowball effect



ELENA Project: Sustainable Tipperary

- Beneficiary: Tipperary Energy Agency
- Start/end: Aug 2017/Jul 2020
- Four areas:
 - Residential EE building renovations (*Superhomes*)
 - Public street lighting,
 - Renewable heating systems
 - Non-residential EE building renovations
- Tailored assistance for various stakeholders – private homeowners, public entities, SMEs

The Conceptualisation of Superhomes

“We’re frustrated with lack of depth and continued use of fossil fuels. We need deeper, faster and renewable retrofit”



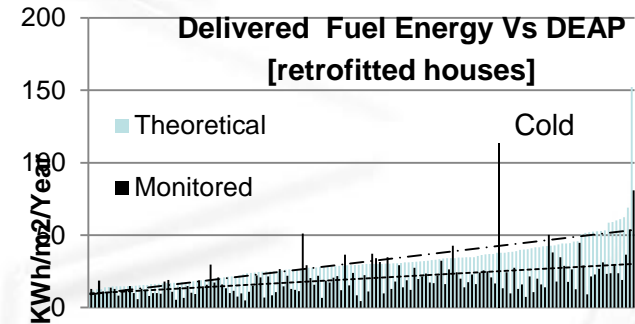
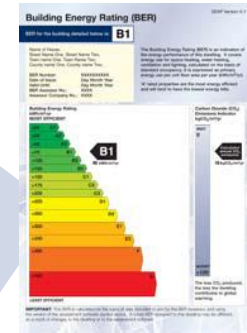
2006 House of Tomorrow Shallow Retrofit 80 homes (F to D)



EU SERVE project 400 buildings E1 to E

2013-2015 ~1000 fuel poverty/ Shallow F to E

Super-Homes D2 to A2/3 Deep Retrofit



Project details

- Planned investment programme is designed to realise the actions under the Tipperary Sustainable Energy Action Plan (SEAP)
- Total amount of eligible investment is estimated at approx. EUR 38m
 - ELENA funding: 1 683 410 EUR eligible (90% = 1 515 069 EUR)
- Investments in most cases will be made by the asset owner
 - Only in the case of the off balance sheet renewable heat contracts will a third party make the investment
- High market replication for this ELENA supported investment programme,
 - financing of some of the elements relay on the national grant scheme (can be achieved and duplicated in any region of Ireland)
 - The proposed project itself is an example of market replication of another ELENA project, namely PICARDIE PASS.

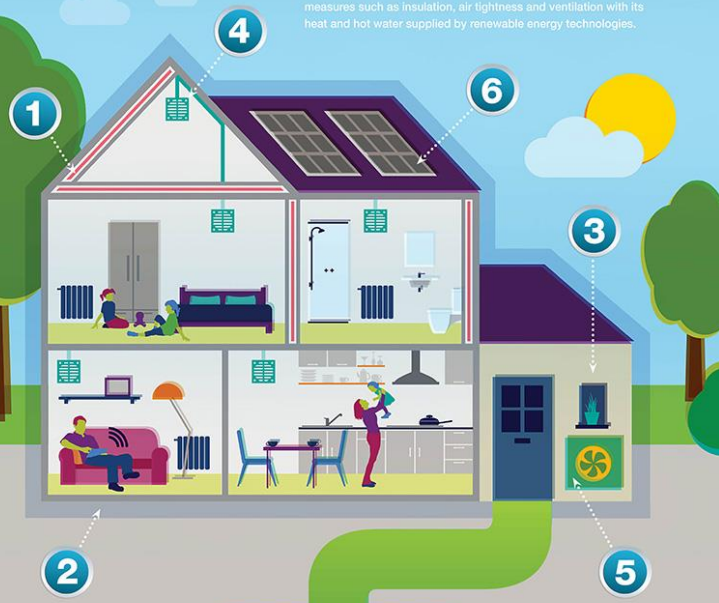
Superhomes project

- National scheme for deep retrofitting of households
- Up to 50% grants
- Designed to implement all cost effective retrofit measures in one package
- A warm house, with healthy interior air
(through excellent ventilation)



What is a SuperHome?

A SuperHome is a comfortable, warm, draught free energy efficient home. It's a home that has all the cost effective energy retrofit measures such as insulation, air tightness and ventilation with its heat and hot water supplied by renewable energy technologies.



What are the features of a SuperHome?

- 1 Cavity wall, attic, flat roof, external wall insulation
- 2 Air tightness throughout the house
- 3 High performance windows and doors
- 4 Demand Control Ventilation
- 5 Air Source Heat Pump
- 6 Solar PV Panels on roof

www.superhomes.ie

@super_homesrl



An initiative of
Tipperary Energy Agency





REPUBLIKA HRVATSKA
REPUBLIC OF CROATIA



OSOBNNA ISKAZNICA
IDENTITY CARD

Prezime/Surname

NEWLIGHT

Ime/Name

Implements **REGEA** on
behalf of two counties

Total investment: app. **20 Mil. €**
EIB contribution: **790.000 €**



Broj osobne iskaznice
Identity card number

Potpis/Signature

Državljanstvo
Citizenship

Datum rođenja
Date of birth

57 cities/municipalities

26 October 2015

First ELENA project in Croatia



Co-funded by the Intelligent Energy Europe
Programme of the European Union

Vrijedi do
Date of expiry

26 October 2018





Recommendations

1. Try to cooperate on regional level

Use regional authorities for bundling process (!)
Availability of skills, technical design capacity, avoid
'reinventing the wheel', reach economies of scale

2. Use standardized methods/procedures

Lower (perceived) risks, facilitated financing, lower costs of
auditing and uniform data, existing GIS integration

3. Consider all financial models

EPC, PPP, D&B contracts, leasing, debt financing,...
Combined financing – ESIF/EFSI !!!

Recommendations (2)

4. Introducing new models of contracting

in public administration requires time - having reference (pilot) projects can help (PPP, EPC...)

5. Communicate with ESCO market players

EPC or PPP projects need to be communicated as early as possible – inform market players about contract model and tendering process details

6. Financial instruments

Financial instruments play important role in boosting ESCO market when grater number of projects plane to be executed

Recommendations (3)

7. Consider smart city aspects, blockchain...

Opportunities - potential revenue sources?

8. Take into account election calendar

Also, public procurement...

**9. Communication, communication,
communication**

Regions/cities/municipalities need to be guided/coached, financing is not enough...

