

Opportunities and Challenges in Existing Buildings

The Renovate Europe Campaign

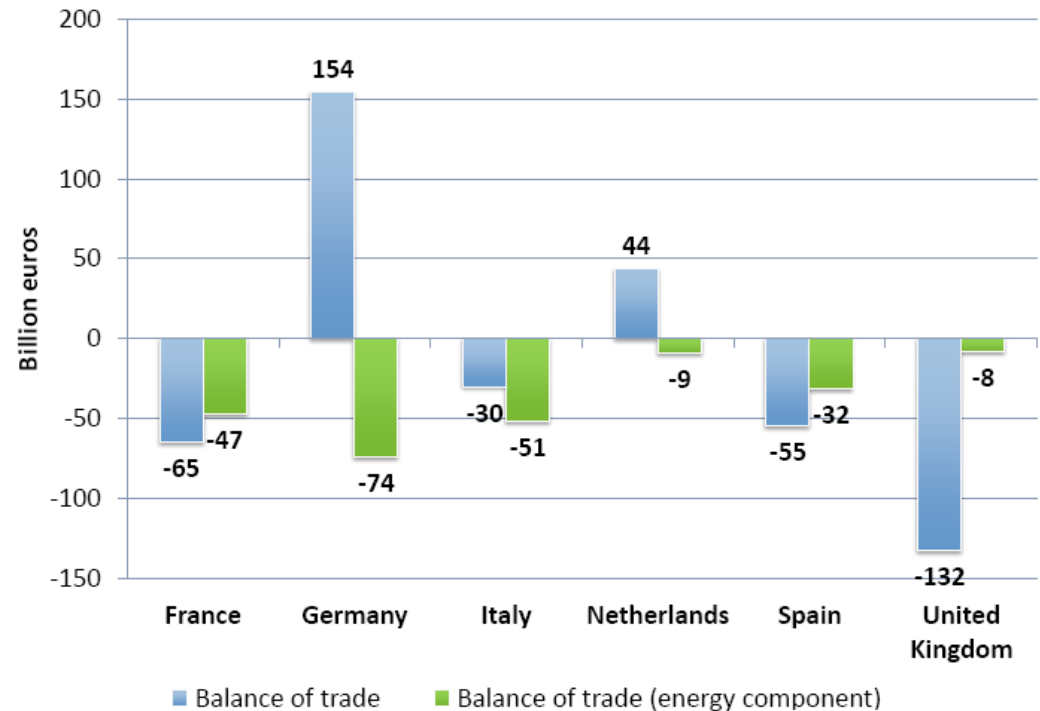


URBAN Intergroup Meeting
Strasbourg
30th April 2015

The Energy Dependence of the EU

- 26 MS are Net Importers
- Dependence :
 - = 40% in the 1980's
 - = 60% in 2011
 - = 80% in 2035 (projection)
- The COST of our imports
 - = €400 billion
 - = 3,1% EU GDP (2012)

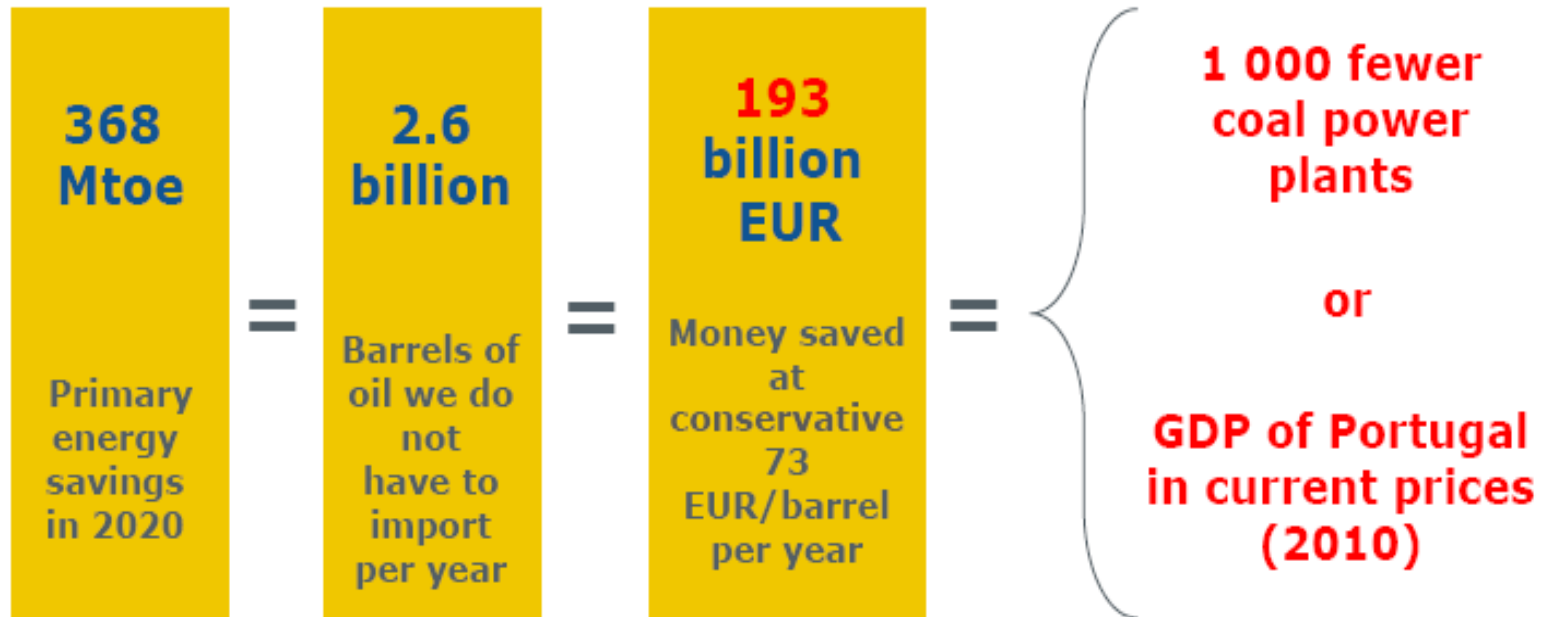
The Impact of our Energy Imports on the EU Trade Balance:



Source: Eurostat

The Benefits of Energy Efficiency

- Achieving 20% Energy Efficiency in 2020 would mean:



Source : European Commission, Presentation by DG ENER, 8/05/2012

Buildings – First Consumer of Energy

What are we talking about?

- 210 million buildings in the EU
- Mostly constructed **before** 1970
- Renovation Rate: +/- 1%
- Demolition Rate: +/- 0,1%
- 75%-90% still occupied in 2050
(OECD)

Energy Use of Buildings (EU27)

- 40% Primary energy
- 36% CO₂ Emissions
- 38% Of gas consumption
- 59% Of electricity consumption
- Residential: 2/3 of consumption



Building gross floor space in the EU27,
Switzerland and Norway



Occupied floor area:
(EU27): 24 billion m²

Buildings – The 1st Source for Savings:

The Potential for Buildings to 2030:

- **61% Residential Segment**
- **38% Tertiary Segment**

- **We Have the Technology to Achieve this Potential TODAY**
- **Needed to Achieve Long-Term Economic Goals**

Realising this potential will allow households and industry to save €239 billion per year!



Economic Benefits of EE Renovations (1)

Energy Savings:

- €66-93 billion per year in 2020
- €131-192 billion per year in 2030
- 127-190 Mtoe cumulative to 2030
= 10-16% final energy in the EU

Public Finances (EU)

- + €39 billion in 2020
- + €78 billion in 2030

Source : Copenhagen Economics



Economic Benefits of EE Renovations (2)

GDP Growth (EU)

- +/- 0.7 % per year
- €670 - €830 billion in increased turnover per year for the construction sector

New Direct Local Jobs:

- 1.1 million on average p.a. to 2050
- 2 million in the year 2020

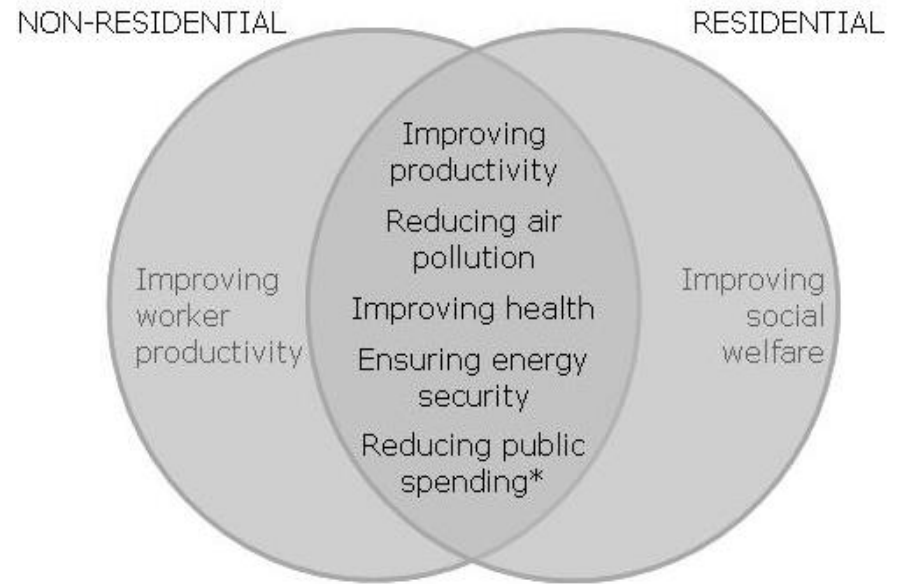
Sources : Copenhagen Economics, BPIE



Multiple Benefits of Energy Efficiency

- **Health:** €1 spent= €0,42 saved in health care
- **Productivity:** 15% gains (thermal and visual comfort plus better ventilation)
- **Air Quality:** €5 to 8 billion savings per year to 2020
- **Asset value:** + 4% for each letter change on an EPC

Sources : Copenhagen Economics, European Commission, Reinaud



The value of induced benefits can reach 2.5 times the value of energy savings

(Reinaud 2012)

Measuring the Induced Benefits

The Copenhagen Economics Study, 2012

- **Deep Renovation:**
 - The most attractive option for energy savings and reductions in GHG
 - Permanent annual benefits for society and public finances
- **Benefits Identified:**
 - Energy Savings
 - Reduced Subsidies
 - Reduced Air Pollution
 - Health Benefits



Societal Benefits per Country

Country	% EU GDP	In 2020 (€bn)	Up to 2018 (€bn)	# Jobs 2020
BE	3.0	5.25	8.92	60,000
DE	20.5	35.87	60.98	410,000
DK	1.9	3.36	5.71	38,000
ES	8.4	14.70	24.98	168,000
FR	15.8	27.65	47.00	316,000
IE	1.2	2.10	3.57	24,000
IT	12.5	21.87	37.18	250,000
NL	4.7	8.23	13.98	92,000
PL	3.0	5.25	8.92	60,000
UK	13.8	24.15	41.05	276,000
EU	100.0	175.00	291.00	2,000,000




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 Multiple benefits of investing in energy efficient renovation of buildings

 Impact on Public Finances

Commissioned by Research Europe
3 October 2022



37 Partner Companies and Associations in 2015:



The Renovate Europe Ambition



Reduce the Energy Demand of the Existing Building Stock by 80% by 2050 Compared to 2005 Levels



Increase Renovation Rate From 1% to 3% Per Year by 2020 and Maintain that Rate to 2050



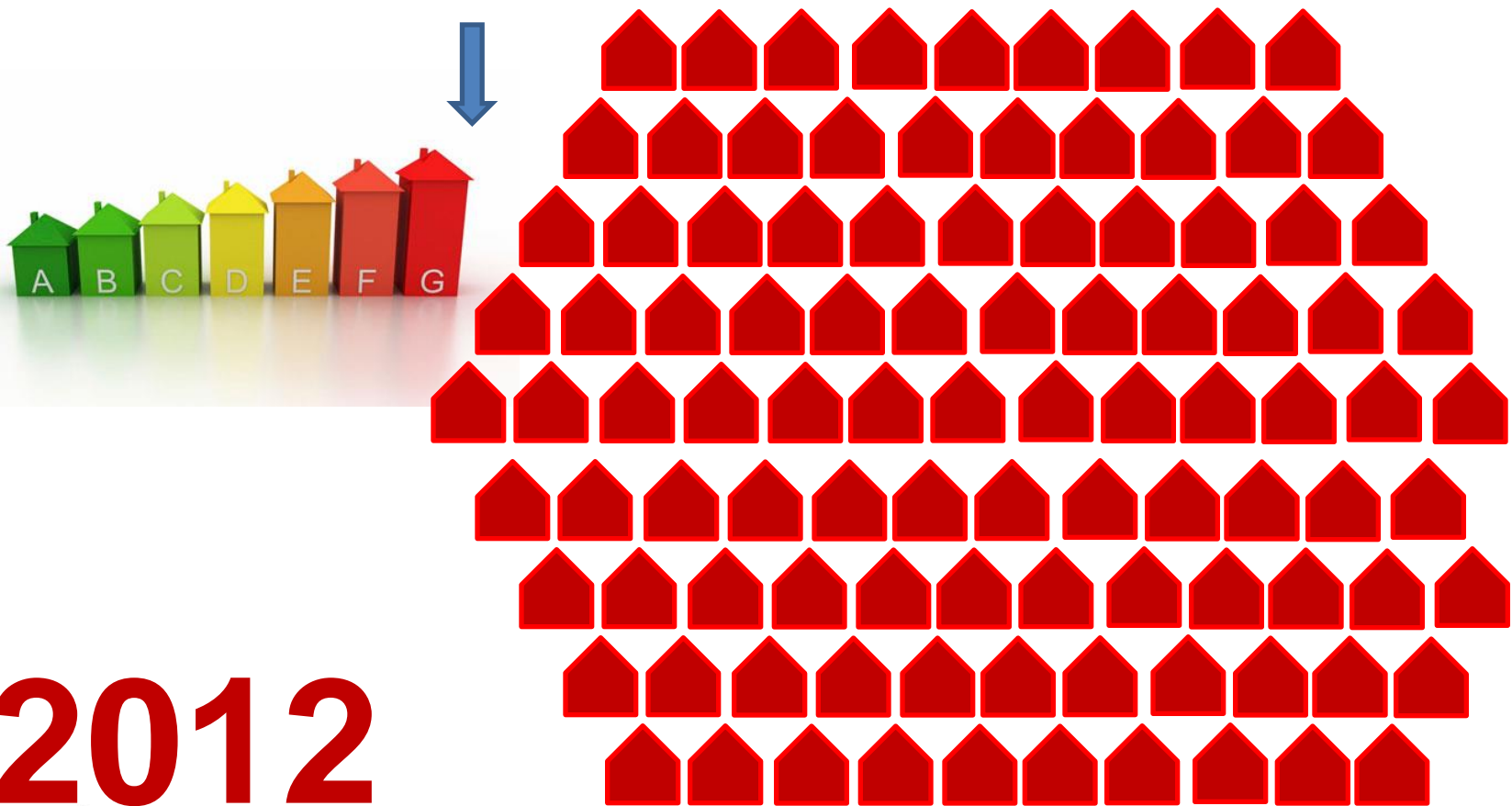
Ensure that all renovations are deep or staged deep renovations to avoid “lock-in”



Drive the Formulation and Implementation of an Effective Policy and Legal Framework for the Achievement of our Ambition

Reduce Energy Demand by 80%

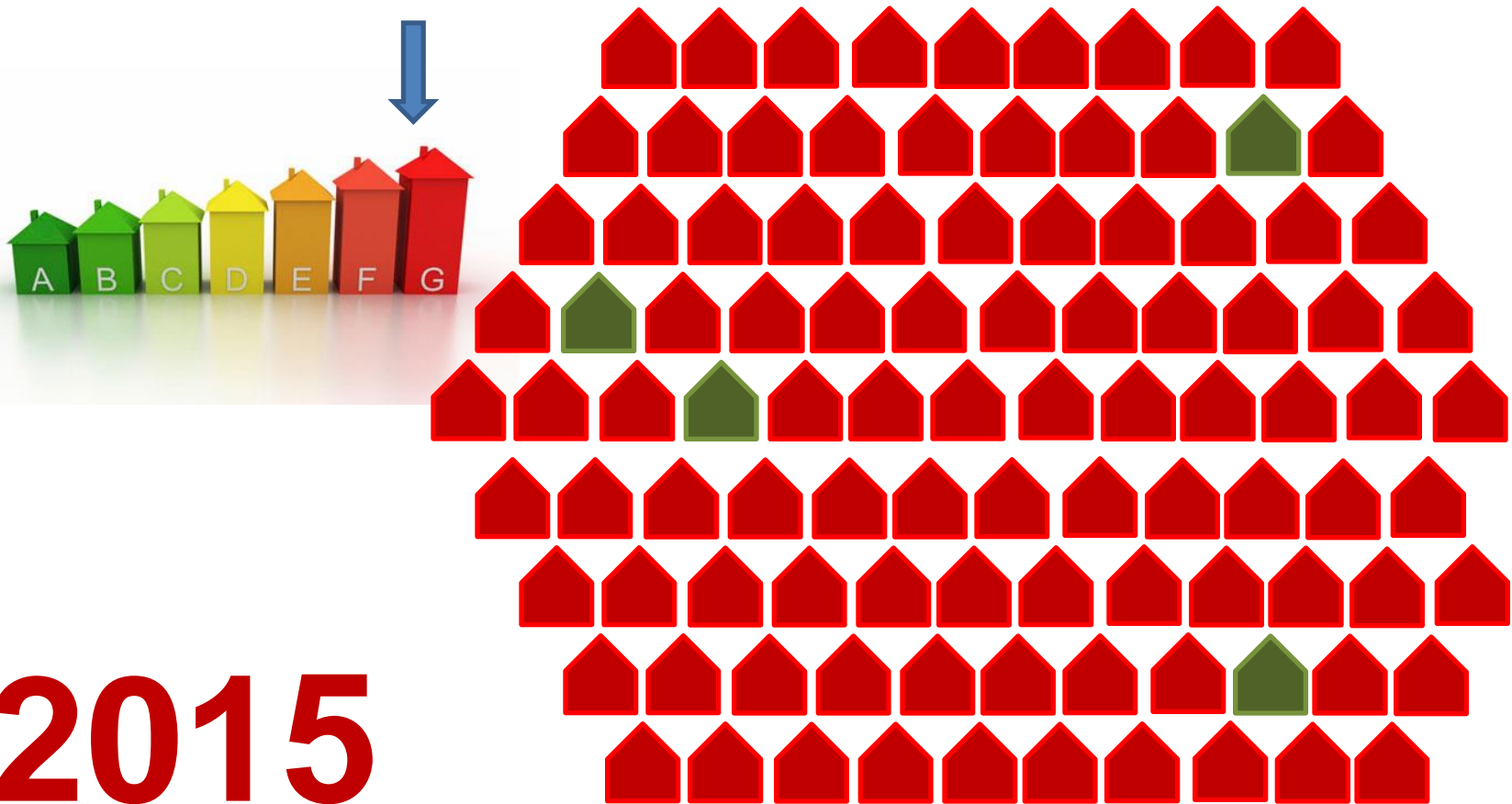
200 kWh/m²/year¹



2012

Reduce Energy Demand by 80%

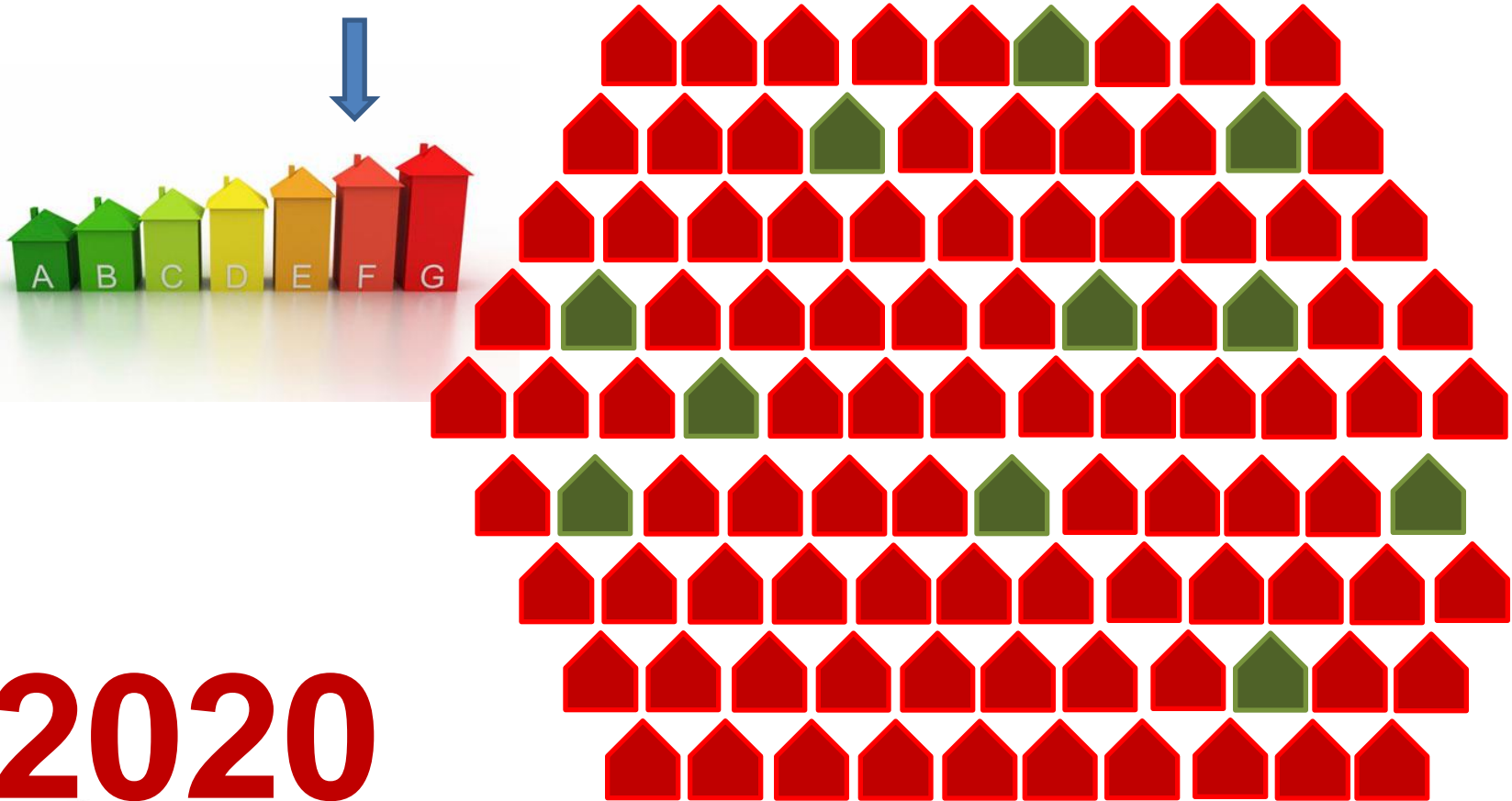
180 kWh/m²/year



2015

Reduce Energy Demand by 80%

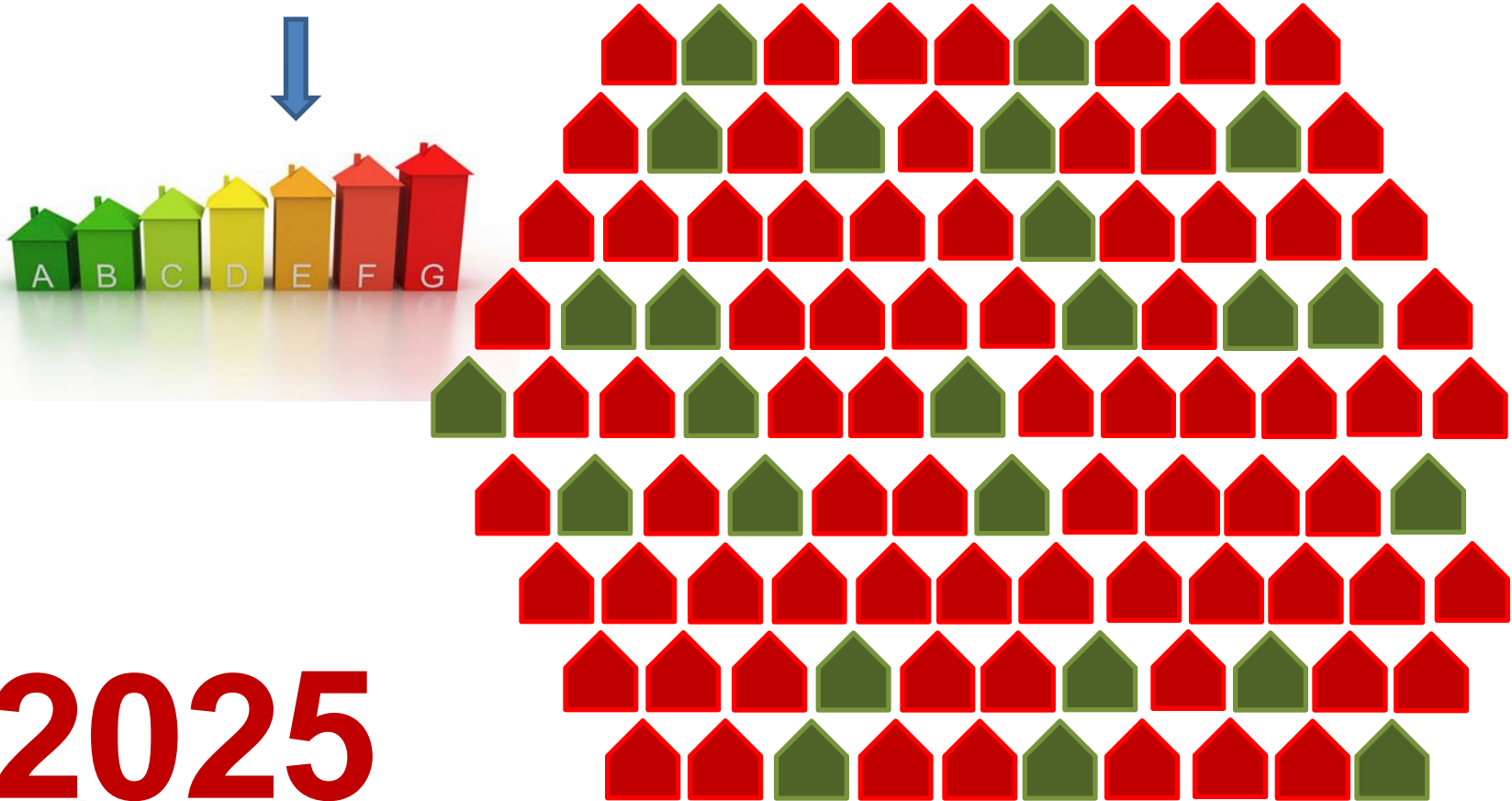
160 kWh/m²/year



2020

Reduce Energy Demand by 80%

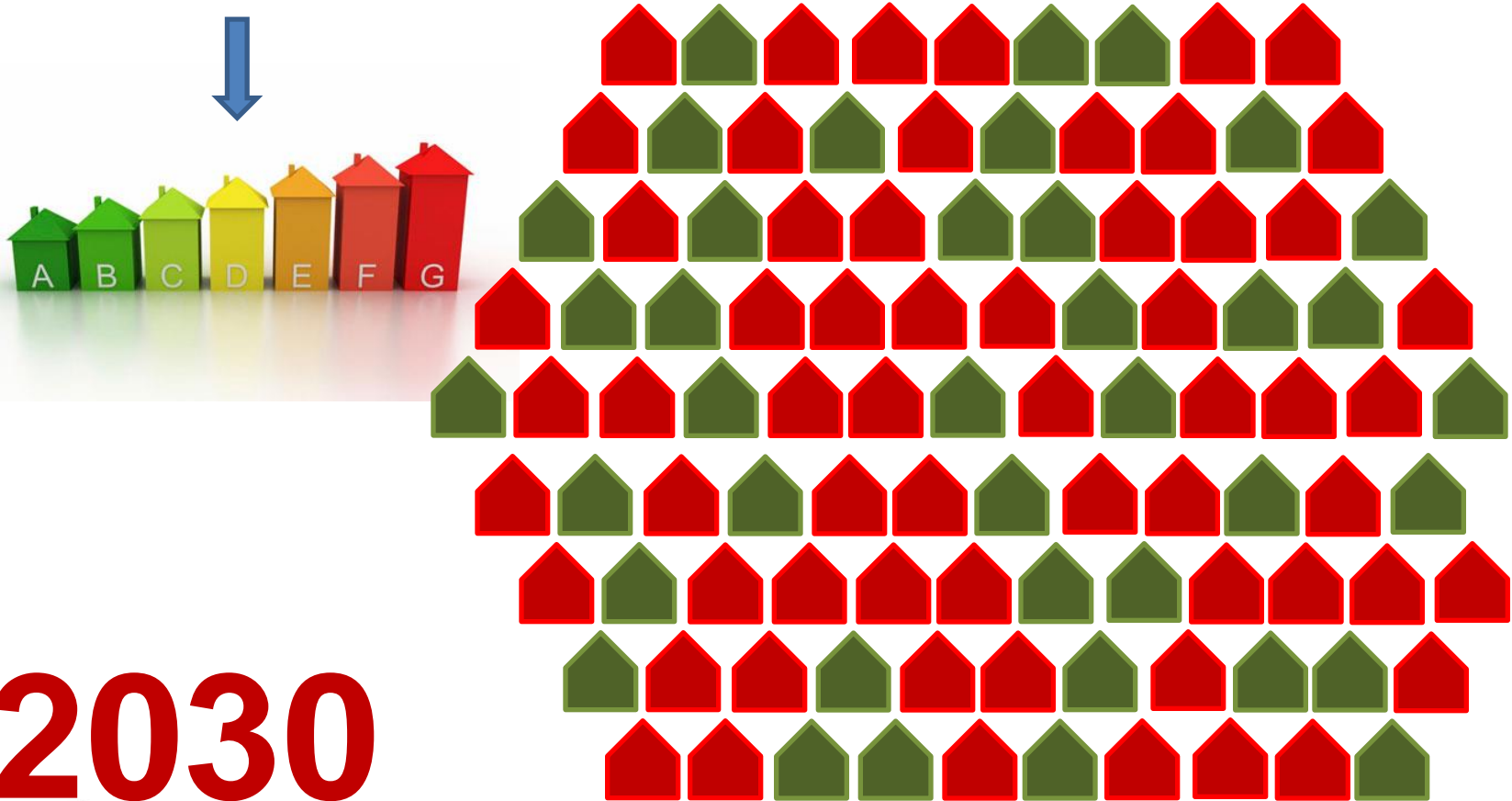
140 kWh/m²/year



2025

Reduce Energy Demand by 80%

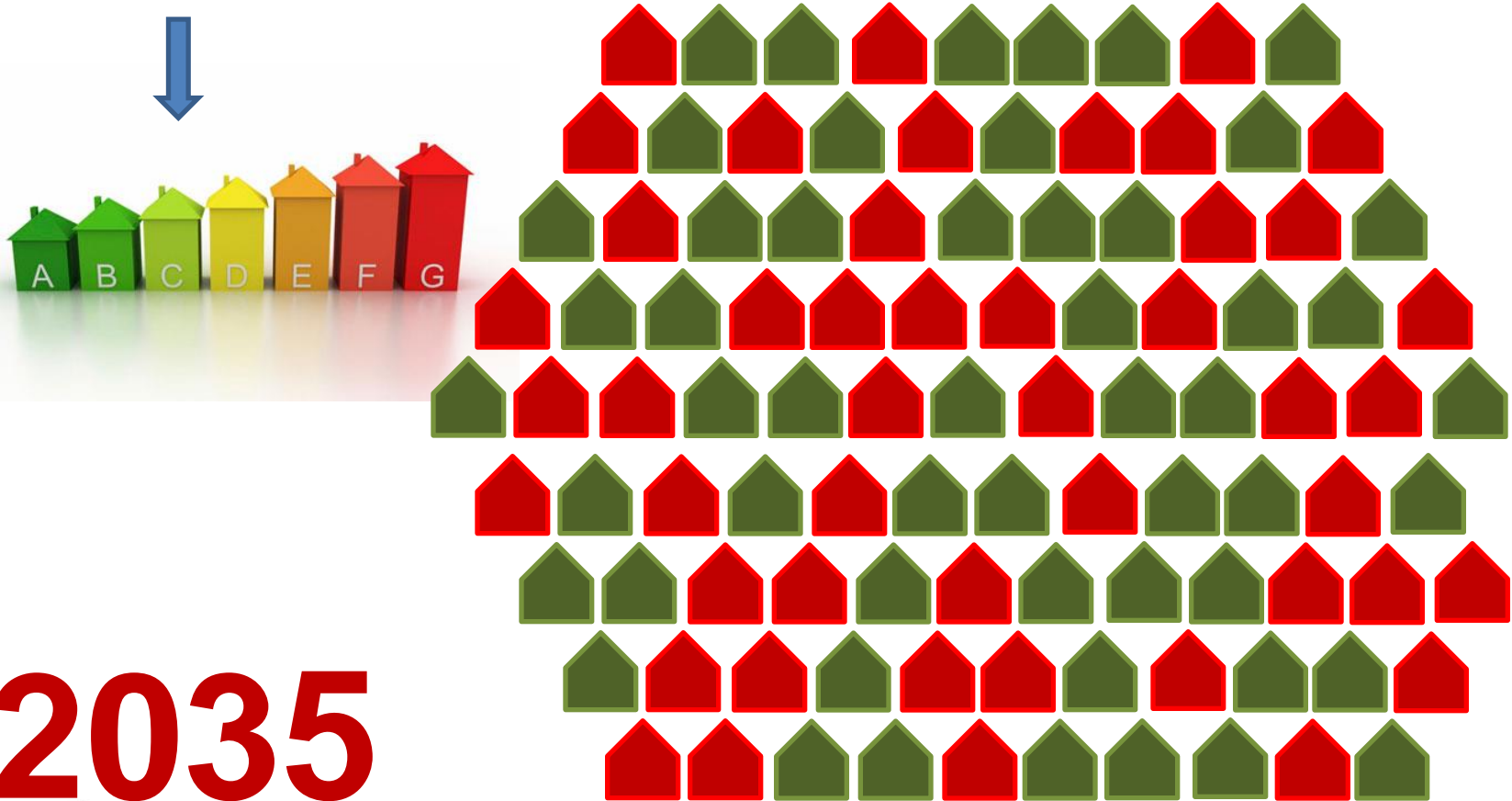
120 kWh/m²/year



2030

Reduce Energy Demand by 80%

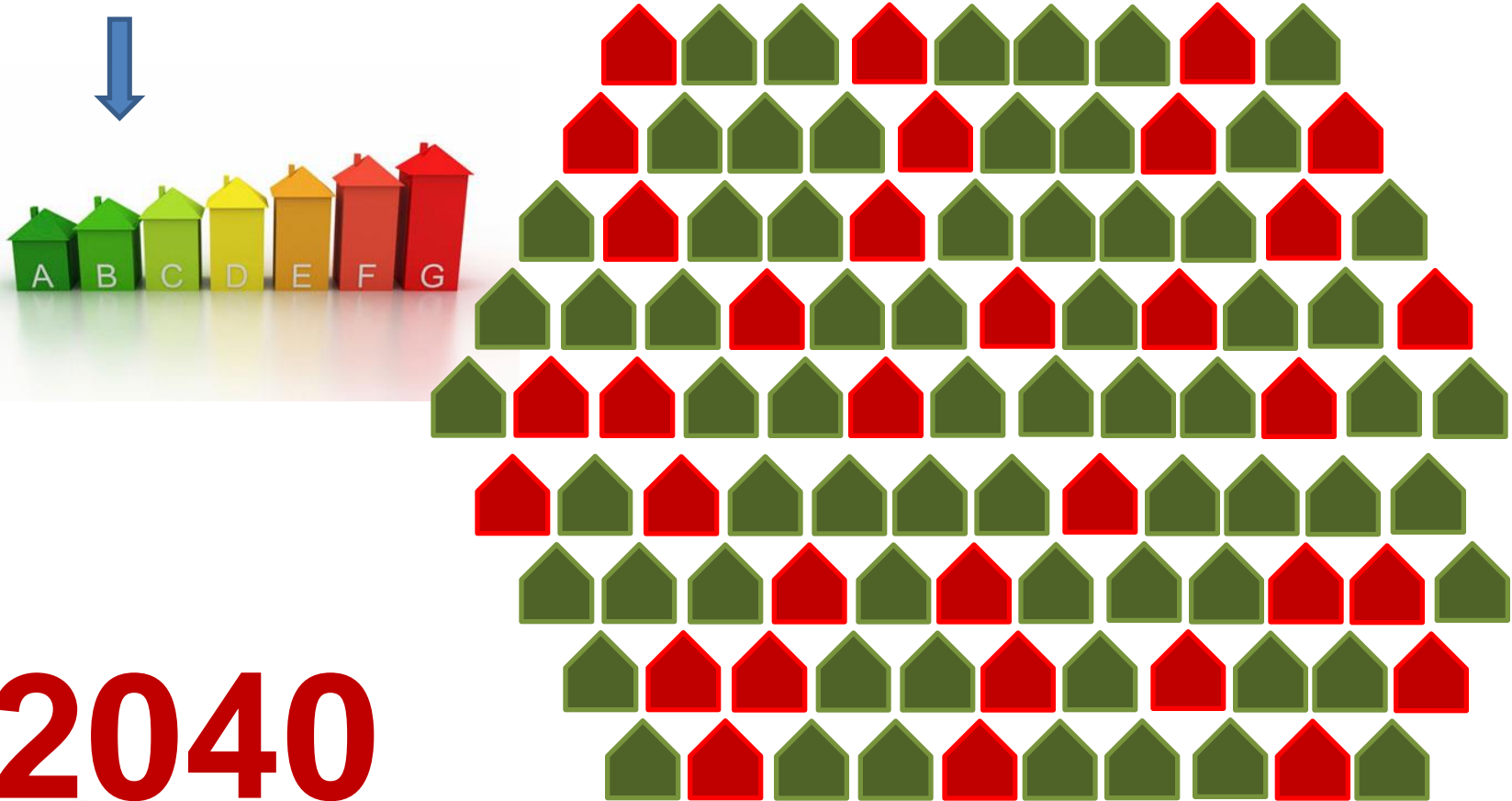
100 kWh/m²/year



2035

Reduce Energy Demand by 80%

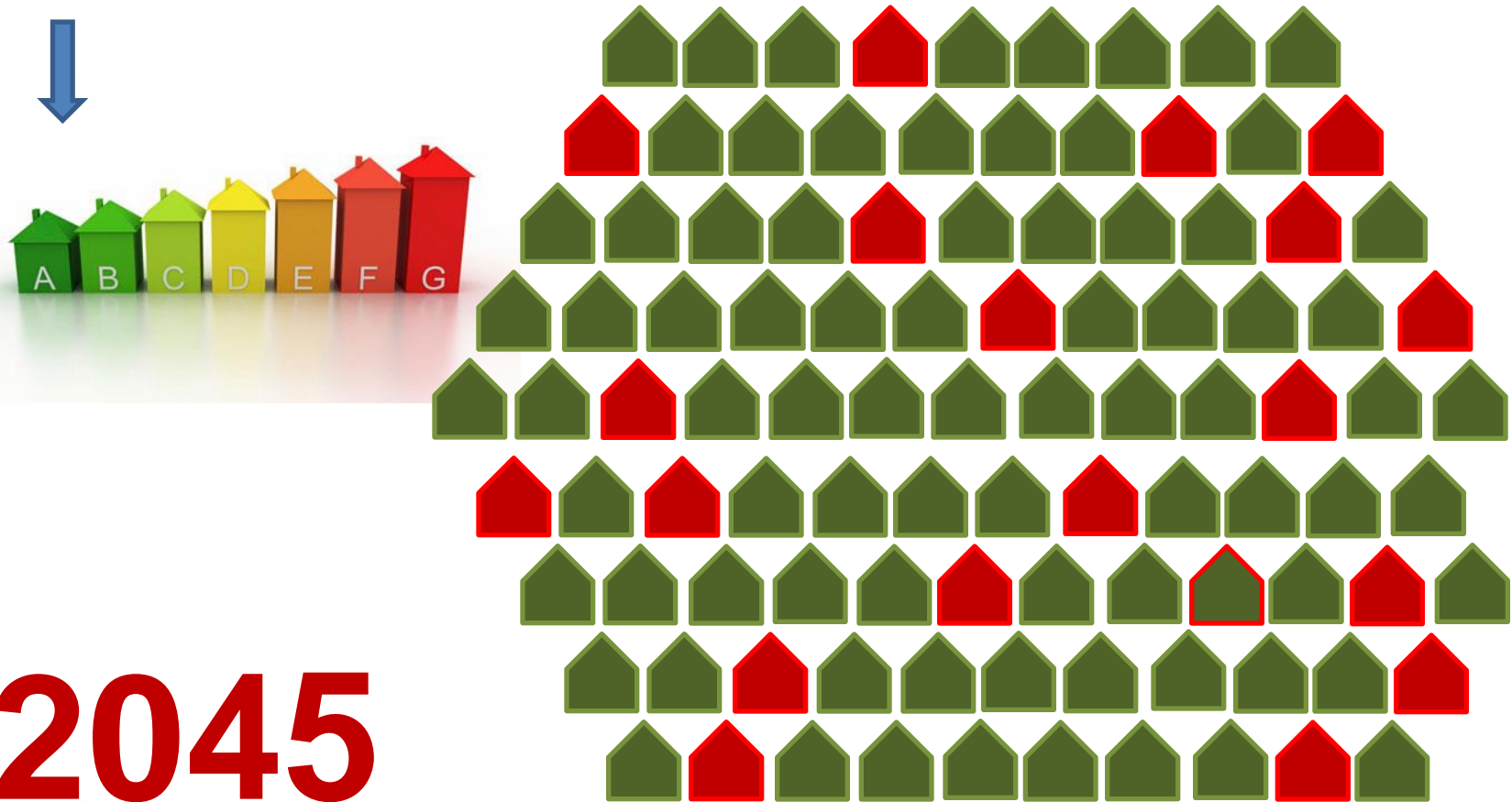
80 kWh/m²/year



2040

Reduce Energy Demand by 80%

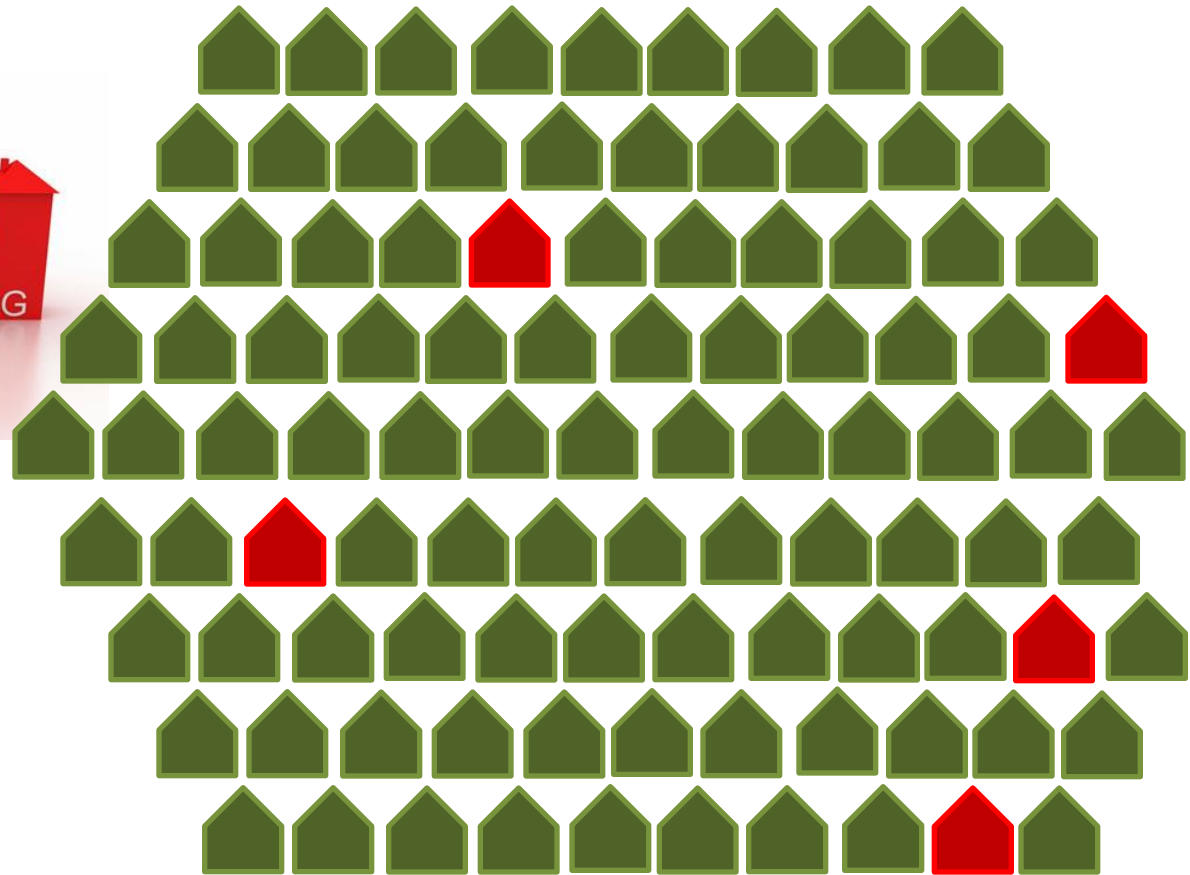
60 kWh/m²/year



2045

Success!

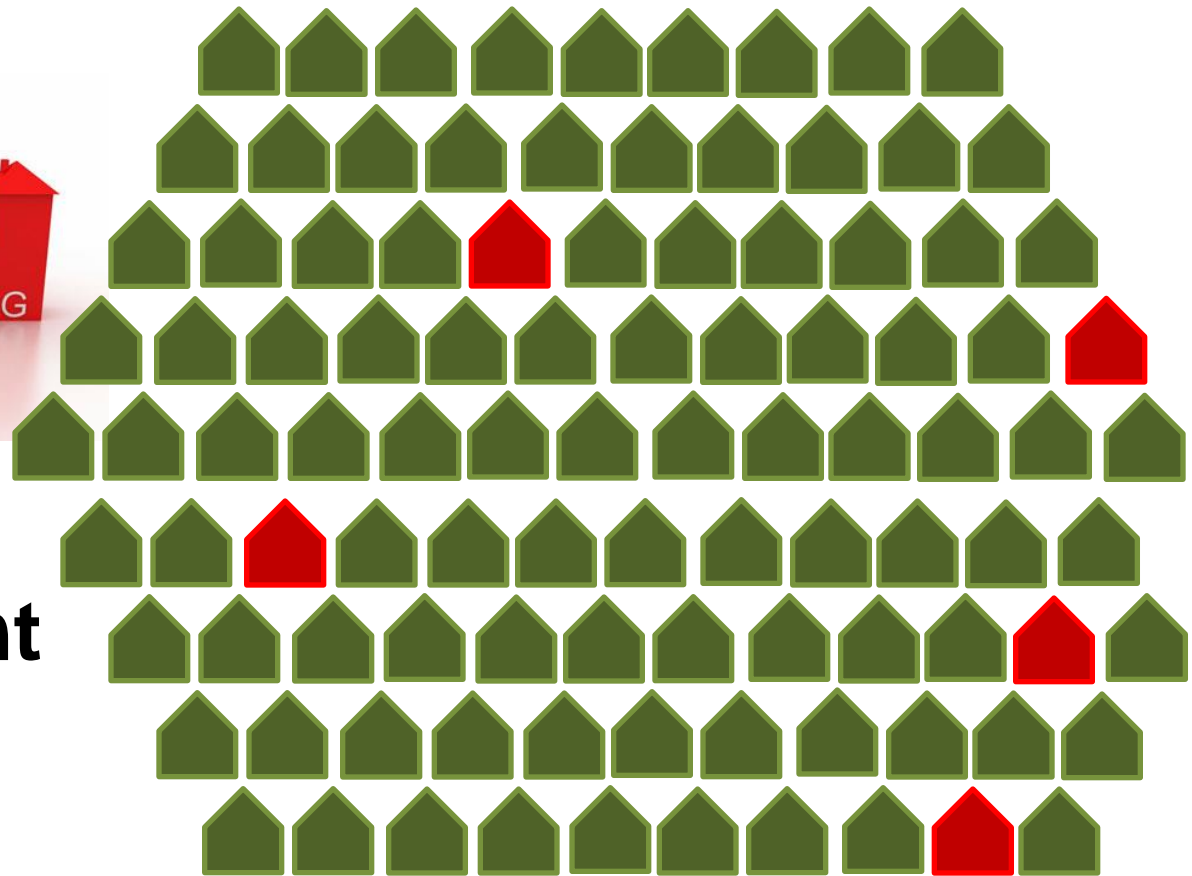
40 kWh/m²/year



2050

Success!

40 kWh/m²/year



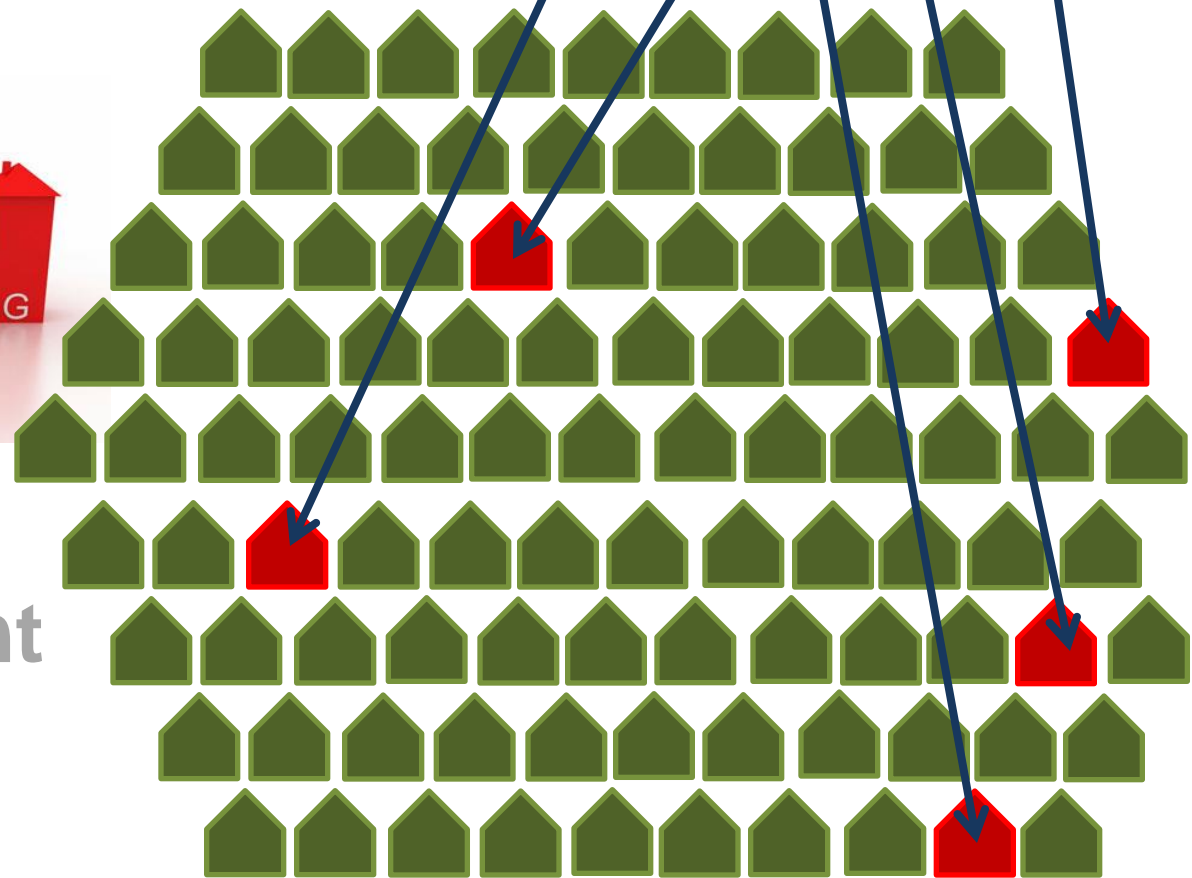
A Factor 5
Improvement

2050

Success!

40 kWh/m²/year

Note That Not All Buildings Have Been Renovated



A Factor 5
Improvement

2050

2014 European Manifesto


RENOVATE EUROPE
MANIFESTO
GET YOUR MEP TO SIGN!



2014 European Manifesto – Before Elections

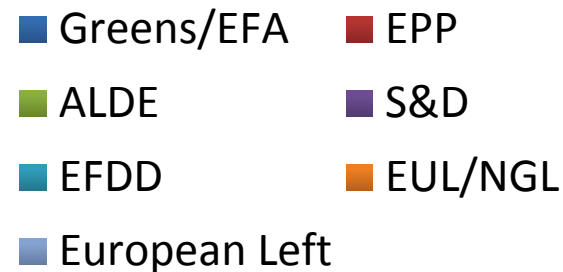
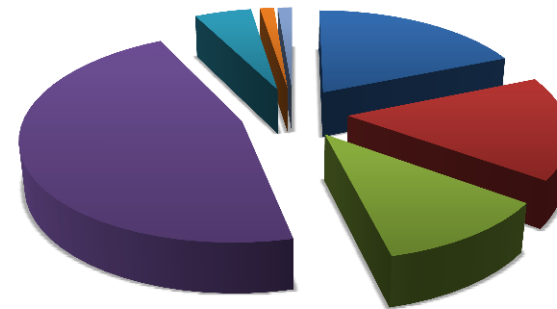
Summary		
Countries	21	
Parties		
	Greens/EFA	19
	EPP	18
	ALDE	16
	S&D	41
	NI	1
	Candidates	92
	Total	187



In total: 187 Signatures before the elections!

2014 European Manifesto – After Elections

Summary		
Countries	21	
Parties		
	Greens/EFA	15
	EPP	14
	ALDE	10
	S&D	37
	EFDD	4
	EU Left	1
	EUL/NGL	1
	Total	81



Today: 81 Signatures of sitting MEPs and rising

REC Work Plan 2015: *It's More Than Renovation*

Policy Issues:

- **Energy Security**
- **Energy Union**
- **Revision of Articles in the EED**
- **Evaluation of the EPBD**

Theme: *It's More Than Renovation*

- **Jobs and Growth Agenda**
- **Be Defined as Key Priority Sector (2030 Dossier)**
- **Publicise the Multiple Benefits More**
- **Increase Support in European Parliament**



TWEETS 705 PHOTOS/VIDEOS 135 FOLLOWING 830 FOLLOWERS 830 FAVORITES 2

Renovate Europe..Now

@RenovateEurope

Beating the drum across Europe to urge politicians to take serious actions for energy efficiency in buildings

Brussels

renovate-europe.eu

Joined April 2011

135 Photos and videos



Tweets Tweets and replies

- Retweeted by Renovate Europe..Now
Alice Corovessi @alicecorovessi · Aug 26
 “@inzebORG: Greek MEP Kostas Chrysogonos supports @RenovateEurope Campaign wp.me/p4BgDh-c4”
- Retweeted by Renovate Europe..Now
Fedarene @Fedarene · Aug 19
 #EESI2020 European Energy Service Award 2014, Awards Ceremony on 8th October in Brussels bit.ly/1pa1t4D

Renovate Europe..Now @RenovateEurope · Aug 19

RENOVATE EUROPE HOME MANIFESTO THE CAMPAIGN NATIONAL INITIATIVES RESOURCES CONTACT

Deep renovation of the EU building stock could create up to two million jobs and kick start the economy

REDay 2014 Securing our Energy Future through ambitious Renovation of Buildings

5th November THON Hotel EU Brussels

REDAY ANNUAL EVENT

RENOVATE EUROPE MANIFESTO

NEWS Newsletter - June 2014

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Editorial

Renovate Europe's Manifesto for the European Parliament Elections was a huge success, with 187 sitting and 570 Energy Waste in Buildings' and 62 of these signatories being elected into the 2014-2019 Parliament. Congratulations once again to all the National Partners of this Manifesto such a success, with contacts and events at the national level. We look forward to strong future cooperation, as the newly elected MEPs take their seats in the European Parliament, to ensure that the energy efficient renovation of the building stock in the EU remains high on the political agenda in Brussels, but also in the National Capitals.

The Ukrainian crisis has brought to the forefront the need to reduce the energy demand in the EU, with buildings at EU a high of 43%. With discussions now ongoing between President Barroso and his Commissioners about the need to set an energy efficiency target for 2030, Renovate Europe and a leading associations in the building sector addressed a letter to President Barroso urging the Commission to design targets in a way that reflects the building sector's contribution in full, following a bottom-up assessment of the real cost-effective energy savings potential in the sector.

Finally, a giant-size poster may have caught your eye if you walk past the European Commission's 14 Charlemagne European partner Energy Cities engaged in a highly visible Communication Action during this year's EUSEW (Sustainable Energy Week) by hanging a giant display buildings, in cooperation with the Commission's OIB services. Come and visit us in front of the poster, and pick up our informative leaflet about Energy Performance Certificates!

I wish you all a relaxing summer break!

Adrian Joyce, RENOVATE EUROPE Campaign Director

Renovate Europe is a Campaign initiated by EuroACE

renovate-europe.eu

Thank you

More information :

info@renovate-europe.eu