FEEDS

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Forum for **E**uropean **E**lectrical **D**omestic **S**afety

Agenda

1. Participants
2. Objectives
3. White Paper
4. Conclusions

1.Participants

- Consumer Association
- Union of Tenant
- Insurance
- Electrical Contractors
- Electrical Installation Equipment Manufacturers
- Fire Brigade

2.Objectives

- To contribute to the improvement of data on fires with electrical source
- To seek and select shared solutions in order to reduce the number of hazardous electrical installations and consequently electrical accidents and fires with electrical sources in dwellings
- To facilitate the availability of these solutions to all stakeholders concerned by electrical safety in dwellings

3. White Paper

- Residential Electrical Safety : How to ensure progress
- Published in May 2017
- http://www.leonardo-energy.org

3. White Paper Why does it matter?

- In Europe 25 to 30 % of all domestic fires have an electrical source
- If we do not step up with additional measures to improve the domestic safety, the issue might become even more urgent in the future

3. White Paper Why does it matter?

- Short term:

Renovation rate for EU dwellings is low

The European building stock is ageing

(86 % more than 25 years old and 51% more than 45 years old)

Vulnerable consumers (young people, single parents, elderly)

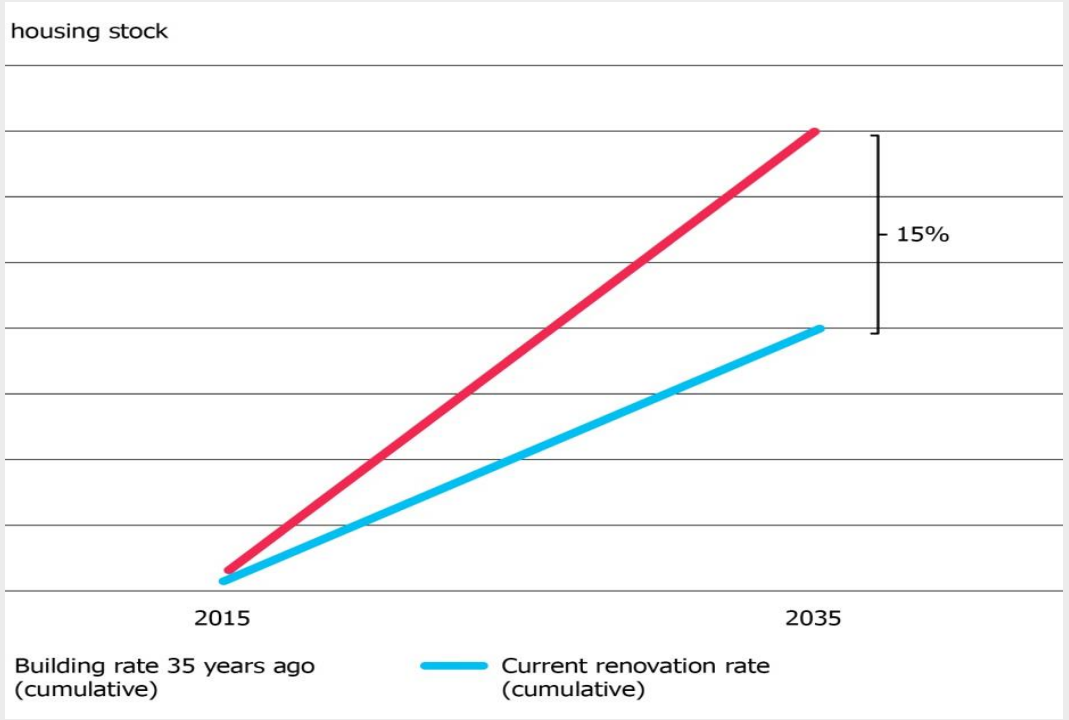
- Medium term:

Generation of local electricity (PV)

Increase demand: heat pumps, electrical vehicle, .

Storage of electricity

3. White Paper Why does it matter?



3. White Paper Methodology

- Fires reported = intervention of fire brigade
- Total number of fires = 2,5 x the fires reported (insurance)
- Fires from electrical source= 25 % of the total number of fires

- Based on our knowledge for given countries (France, UK, Germany, Spain & Poland)
- What could be the current situation regarding fires of electrical sources in EU
- Division of EU in 3 regions
  - Northwestern
  - Eastern & Central
  - Southern

3. White Paper Results

- Northwestern EU: Austria, Belgium, Denmark, Finland, **France**, **Germany**, Ireland, Luxembourg, Netherlands, Sweden, **UK**

	Population	Number of dwellings	Electrical fires
NW EU	**273 587 055**	**124 147 897**	**213 920**

- Eastern & Central EU: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, **Poland**, Romania, Slovakia, Slovenia

	Population	Number of dwellings	Electrical fires
E & C EU	**105 970 262**	**40 636 222**	**23 006**

- Southern EU: Cyprus, Greece, Italy, Malta, Portugal, **Spain**

	Population	Number of dwellings	Electrical fires
S EU	**133 205 368**	**62 207 305**	**44 727**

- EU domestic fires of electrical source per year (0.12% housing stock)

	Population	Number of dwellings	Electrical fires
Northwestern EU	273 587 055	124 147 897	213 920
Central & Eastern EU	105 970 262	40 636 222	23 006
Southern EU	133 205 368	62 297 305	44 727
EU total	**512 762 685**	**227 081 424**	**281 653**

- 32 home fires every hours due degraded, faulty electrical installations and misuse of appliances

3. White Paper Enforcing electrical safety

- International and national standards
- Preventive actions: Training of installers, Qualifications & certification, Information and awareness campaigns
- Regulation: Initial verification and periodic inspection

3. White Paper The economic model

Property damage

France

Average €10 000 (insurances)

200 000 fires → €2 billion

EU

5.6 times number of fires in France

GDP 107%

Total property damage in EU → €10 billion

Detailed economic model (cost; saving) available in the report

3. White Paper Injuries & deaths

- EU 1 000 fatalities & 20 000 injuries by year

Residential Electrical Safety- how to ensure progress?

7. Beyond EU

What are the consequences of an increased electrical safety in countries that have been active in the domain?

	Population	Dwellings	Electrical Fires	Injuries	Deaths
EU	512 762 685	227 081 424	281 653	20 000	1 000
Japan	**126 475 664**	**53 890 900**	**52 711**	**892**	**12**
USA	**313 232 044**	**129 969 653**	**47 700**	**1570**	**418**

Conclusions

- The fight against hazardous domestic electrical installations is far from being won in all EU countries.

  Especially since the trends are towards an amplification of the phenomenon while the uses of domestic electricity continue to diversify and develop.

Conclusions

- The major issue of domestic electrical fires is not yet sufficiently taken into account in most EU countries and the lack of data on the matter can partly explain this situation.

Conclusions

- In any case, the first positive results regarding the improvement of renovation rate or safety of old electrical installations appear in the countries where the statistical quantification of the phenomenon has been carried out.

Conclusions

- In those countries, measures have been taken to generalize the condition assessment of the old electrical installations and to inform their user about this condition.

Conclusions

- Where public policies in that direction have been the subject of a cost-benefit assessment, they have in any case proved positive, both for the parties concerned and for the community as a whole.