







# **National Expert Forum web meeting**

HARP Heating Appliances Retrofit Planning

21 ottobre 2020 ore 10:30

Agenzia nazionale per le nuove tecnologie, l'energia e la sviluppo economico sostenibile









## **Ordine del Giorno**

- 1. Stato di avanzamento progetto HARP
- 2. Presentazione HARP-a (tool per l'etichettatura energetica)
- 3. Prima campagna di sensibilizzazione: materiali per consumatori e professionisti
- 4. Definizione delle modalità di supporto dei membri del NEF





Le premesse e il contesto..



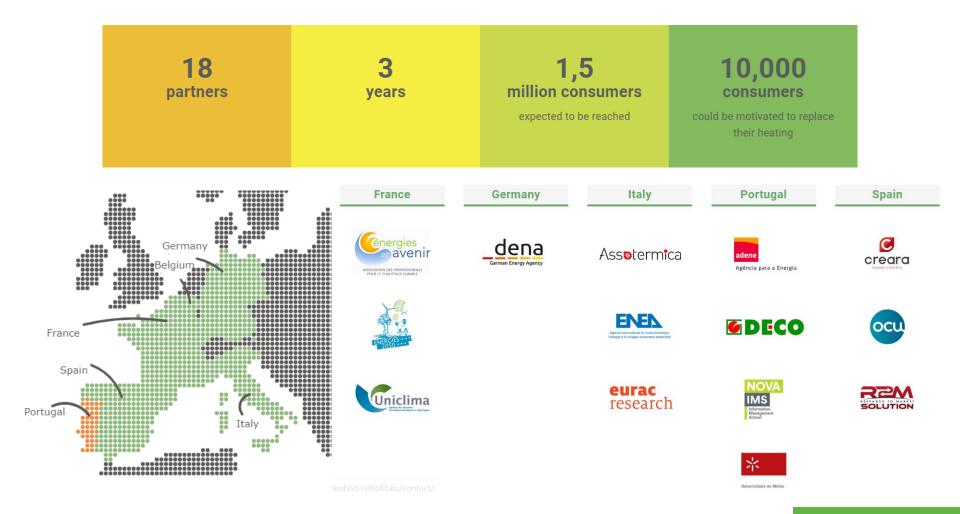


## 1. Stato di avanzamento progetto HARP

a cura di Daniela Lobosco



HARP's main goal is to motivate individuals to plan the replacement of their often outdated and fossil-fuel operated heating appliances, with more efficient alternatives.







What is the main HARP idea?

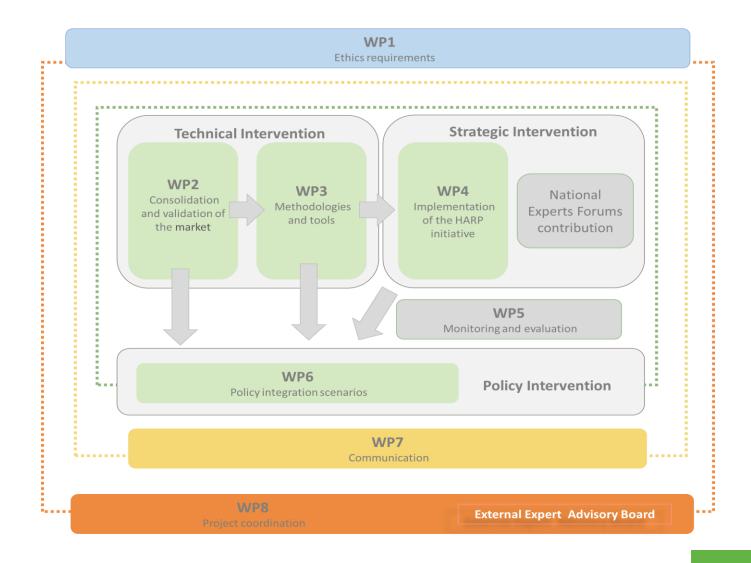


The main idea is to define the **energy label for installed heating** boilers





## HARP structure – WPs overview







2. Presentazione HARP-a (tool per l'etichettatura energetica)

Efficient Heating System

**Online-check** 

In order to tailor this app to your situation, we need start with a few general questions.

In which country is the building located?

Spain

~

What describes best your role? I am a ...

End User

Heating Professional

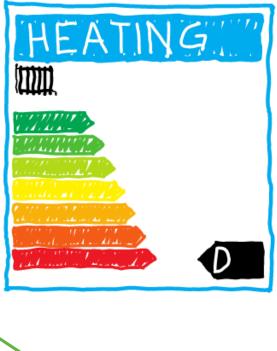


### Existing Heating System

## **Calculate Energy Label**

System type		Your existing boiler
Boiler	~	of <b>67%</b> , reaching an
Energy source used by your installed heating	ng appliance	
Gas	~	HEA
Boiler age (installation year)		
1987 <y<=1994< td=""><td>~</td><td>Contractory</td></y<=1994<>	~	Contractory
<b>Optional field(s) below</b> : Leave empty not sure. The values missing will be f default values		and the second s
Nominal power (in Kilowatt, kW)		
Calculate Label		Vers

our existing boiler has an estimated efficiency f **67**%, reaching an energy label class of **D**.



*Versione semplificata per il consumatore* 

#### Existing Heating System

### Calculate Energy Label

Boiler	~		
Energy source used by your insta	alled heating appliance		
Gas	~		
Boiler age (installation year)			
1987 <y<=1994< td=""><td>~</td><td></td><td></td></y<=1994<>	~		
Optional field(s) below: Leav			
not sure. The values missing default values	will be filled with		
Boiler type			
Please chose	~		
Nominal power (in Kilowatt, kW) η <sub>30</sub> (efficiency at 30% part load c value, in %)	defined at net calorific		
<b>η<sub>30</sub></b> (efficiency at 30% part load of value, in %)			
$\eta_{30}$ (efficiency at 30% part load o			
η <sub>30</sub> (efficiency at 30% part load o value, in %) η <sub>100</sub> (efficiency at full load define	ed at net calorific value,		
η30 (efficiency at 30% part load of value, in %)   Π100 (efficiency at full load define in %)	ed at net calorific value, att)		
η <sub>30</sub> (efficiency at 30% part load of value, in %)   η <sub>100</sub> (efficiency at full load define in %)   P <sub>stby</sub> (stand-by heat losses, in Wate losses, in Wate losses)	ed at net calorific value, att)		



## **Estimate Your Energy Demand**

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~
~

Next questions

#### Intended use

## Some technical requirements

#### Storage space available?

Is a minimum of 1.5 m<sup>3</sup> available (1 m<sup>2</sup> x 1.5 m height)?



#### Garden/Land available?

Is at least 40 m<sup>2</sup> available?



### Roof available?

Is at least 6 m<sup>2</sup> available?



### Gas network

Is the house connected to the gas grid?



### Electric capacity sufficient?

Does the house have an electic capacity of at least 3 kWh?



Show Results

## **Possible Heating Solutions**

Please find below the results for different technologies and your situation:

Order by Energy Cost	Order by Energy Savings		Ordered by CO <sub>2</sub> Savi	ngs
Technology	Energy	Energy cost [€/a]	Energy savings [kWh/a]	CO <sub>2</sub> savings [t/a]
Biomass boiler	Biomass	2812	8,71	5,49
Heat pump, ground/water	Electricity	694	23,78	4,39
Heat pump + Solar thermal	Electricity, Solar	1287	20,64	3,45
Heat pump, ground/water	Electricity	1388	20,1	3,29
Boiler + Solar thermal	Gas, Solar	1017	10,07	2,01
Condensing boiler	Gas	1097	8,71	1,74
Gas heat pump	Gas	1194	7,04	1,41





Primi feedback



common information



#### **Timeline** Start End Oct Nov Work Package/Task title M7 M8 M9 M10 M11 M12 M13 M14 M15 M16 M17 M18 M19 M20 M21 M22 M23 M24 M25 M26 M27 M34 M35 M36 M37 M38 M39 M1 M4 M5 M6 M29 M32 M33 2019 2020 2021 2022 may june july aug set oct nov dez jan feb mar apri may june july aug set oct nov dez jan feb mar apri may june july aug set oct nov dez jan feb mar apri may june july WP1 - Ethics requirments Task 1.1. Ethics requirments WP2 -Consumer and the Heating market Consumer behaviour change journey D2.1 Task 2.1. D2.2 Task 2.2. Heating appliances stock Task 2.3. Market solutions and potential D2.3 Task 2.4 Co-benefits D2.4 WP3 - Labeling methodologies and tools D3.1 Task 3.1. Labelling methodologies and testing Task 3.2 Online app D3.2 WP4 - National and European initiatives HARP implementation strategy D4.1 D4.1 Task 4.1. Engagement strategies and materials for Task 4.2 D4.2 consumers Engagement strategies and materials for Task 4.3 D4.3 professionals Implementation of the HARP Action Plan Task 4.4 D4.4 D4.4 at national and EU level WP5 - Engagement monitoring and evaluation Task 5.1 Monitor of engagement actions D5.1 D5.2; D5.3 Task 5.2. 1st season evaluation Final evaluation and impact of 2nd season Task 5.3 D5.2 implemetation actions WP6 - Policy integration scenarios Benchmark of experiences and best practices Task 6.1. D6.1 D6.1 among the participating countries. Recommendations for policy integration D6.2 Task 6.2. Task 6.3 Sustainable management features D6.3 WP7 - Cor nication, dissemination and exploitation Creation of a communication strategy and Task 7.1 D7.1 D7.1 toolbox D7.2 D7.2 Task 7.2. Mapping of key influencers at EU-level Dissemination of the information on project Task 7.3 D7.3 outcomes Replication and moving beyond the project Task 7.4 D7.4 frontiers WP8 -Project coordin Task 8.1. Overall project coordination and management D8.1 D8.2 D8.6 D8.7 D8.8 Task 8.2. Quality assurance D8.5 D8.3 D8.3 D8.3 D8.4 D8.4 D8.4 Task 8.3 External expert Advisory Board Task 8.4 Comunication flow between the partners Contribute, upon invitation by the EASME, to Task 8.5



3. Prima campagna di sensibilizzazione: materiali per consumatori e professionisti

a cura di Daniela Lobosco e Enrico Genova





## WP4 - Engagement initiatives, implementation (Leader: Assotermica)

Deployment of an integrated **engagement campaign** focused on the consumer and fostering his **behaviour change** when confronted with inefficient heating solutions:

- define the **HARP National Action Plans** to deploy in Portugal, Germany, Spain, Italy and France:
  - Build the <u>National Experts Forum</u> (minimum 10 stakeholders)
  - Define <u>activities for the two heating season campaigns</u>
- develop engagement materials for consumers, toolbox including: articles, brochure, videos, factsheets, infographics, online serious games, etc.
- **develop commitment materials for professionals**, toolbox including: articles, brochure, trainings, tutorials
- Implementation of the HARP Action Plan at national and EU level





# **SUMMARY OF KPIS**

## **CONSUMERS**

	reached consumers	ask for a label	replace the heating system
France	376275	11100	2664
Germany	464122	13692	3286
Italy	339668	10020	2405
Portugal	58863	1736	417
Spain	261072	7702	1848
TOTAL	1.500.000,00	44.250,00	10.620,00

**Reached consumers:** via all the activities being developed at the national level: including visits to the national websites, reached by the partner's social media posts, reached by media channels as articles in magazines and journals

Ask for a label: number of labels generated in the national language

**Replace the heating system**: number of consumers that use the online application and complete all the steps, visualizing the final report on available solutions and TCO analysis.





# **SUMMARY OF KPIS**

## **PROFESSIONALS**

	<b>Professionals trained</b>
France	250
Germany	250
Italy	250
Portugal	100
Spain	150
TOTAL	1.000

## **POLICY LEVEL**

10 public authorities include heating systems in their energy efficiency measures programes (regulations, incentive, financing schemes, etc.) – **2 per country** 

Three endorsments of the HARP resources in National policy instruments – aim at 1 per country





## **NATIONAL EXPERTS FORUM – NEXT STEPS**

- supporting network, involving the most relevant stakeholders, also public authorities and consumer-oriented agencies
- average of 10 entities
- Three meetings are to be scheduled:
  - 1<sup>st</sup> meeting (up to M15) HARP strategy at the national level, activities and cooperation definition & HARP tools presentation and validation;
  - 2<sup>nd</sup> meeting (up to M25) 1st results, feedback, best practices and update of the national action plan;
  - 3<sup>rd</sup> meeting (up to M32) policy integration scenarios for the national follow up and business models.







Feedback dei presenti





Grazie per l'attenzione

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