



# Macht Europa Wärmewende? Und wenn ja ... welche Impulse kommen aus Brüssel?

15. Forum Wärmepumpe  
23. + 24. November 2017  
Berlin

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# European Heat Pump Association (EHPA)

- **121 members from 22 countries (status 09/2017)**
  - Heat pump manufacturers
  - Component manufacturers
  - National associations
  - Consultants
  - Research & test institutes
- **EU-wide representative of heat pump industry**
- **Registered in Brussels**

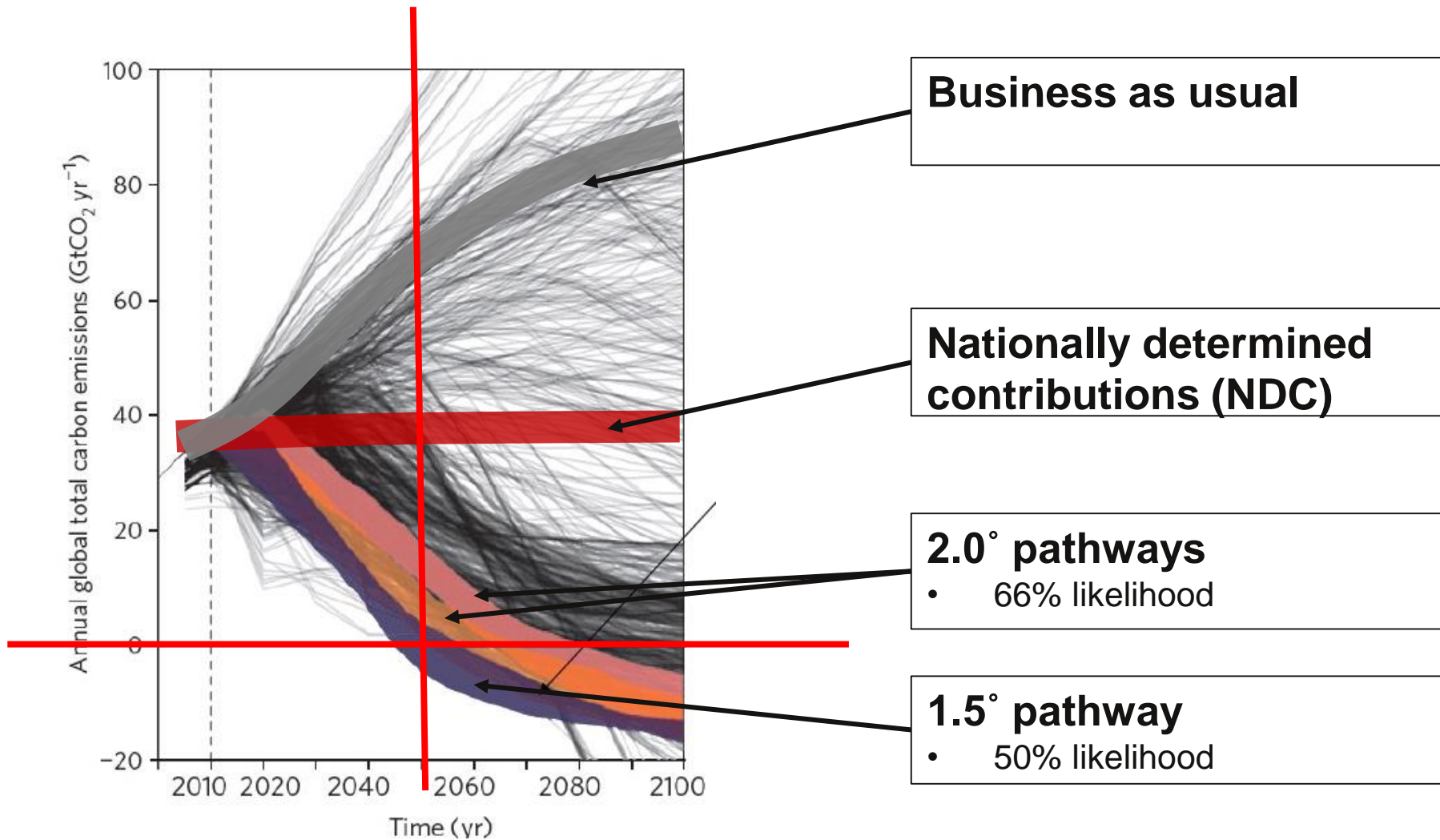


**EHPA represents the majority of players in the EU heat pump industry!**

# 2015 verpflichteten sich 195 Nationen die Erderwärmung auf max. 2°C/ Ziel: 1,5°C zu begrenzen

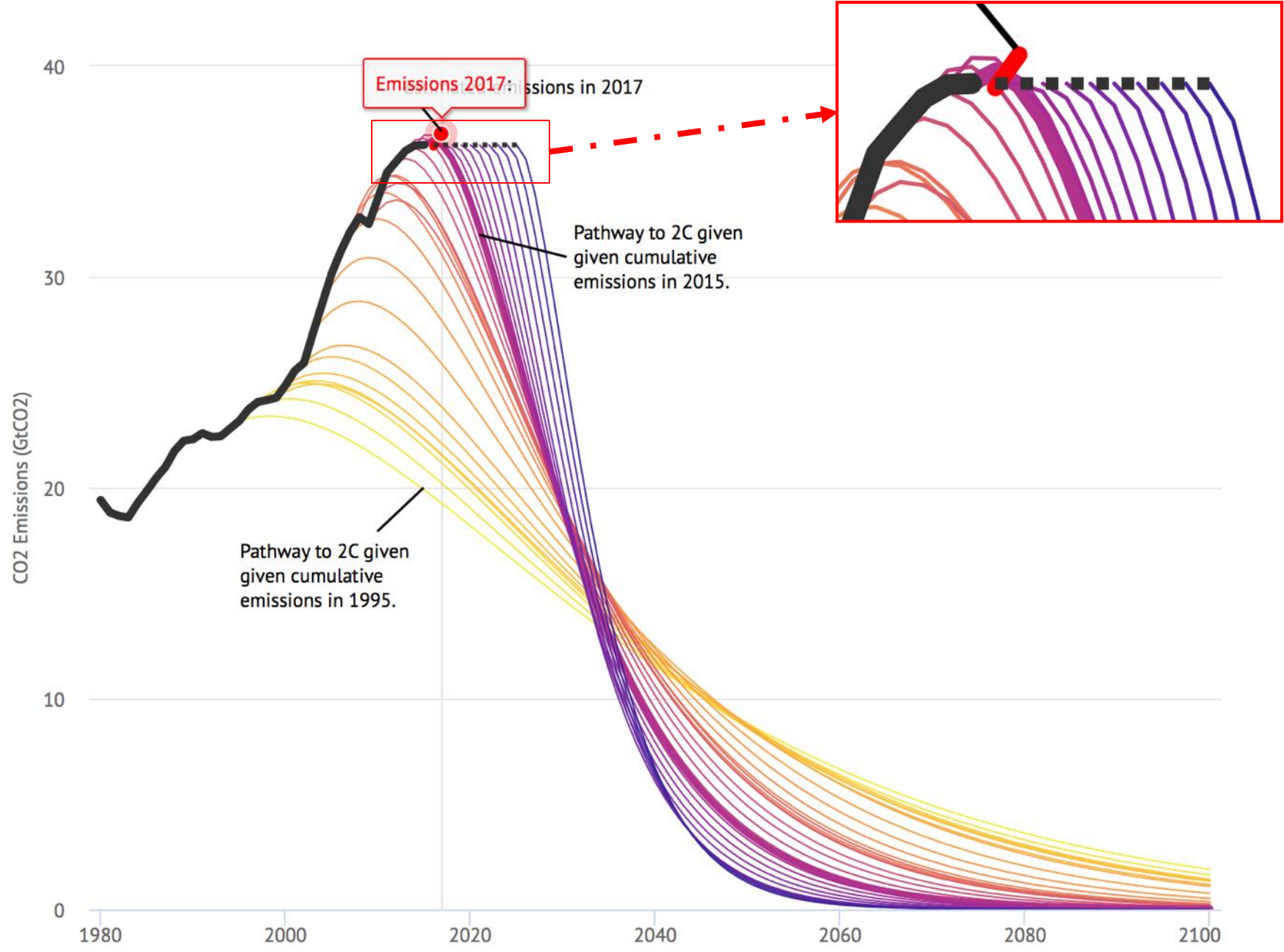


# Es bleiben 33 Jahre, um dieses Ziel zu erreichen



Source: IPCC 5th assessment report  
Rogelj et al. (2015): Energy system transformation for limiting end-of-century warming to below 1.5°C. Nature Climate change

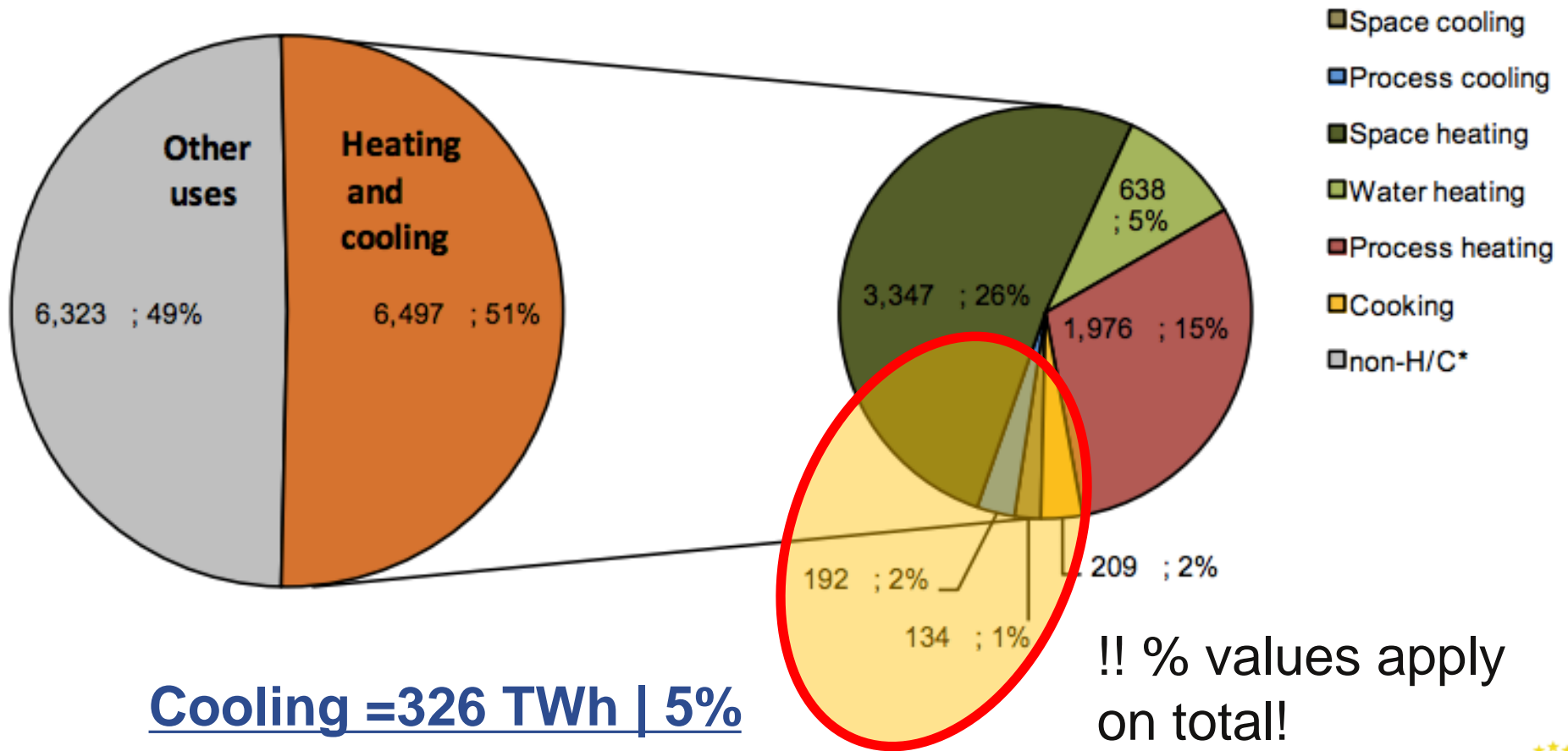




<https://www.carbonbrief.org/analysis-global-co2-emissions-set-to-rise-2-percent-in-2017-following-three-year-plateau>



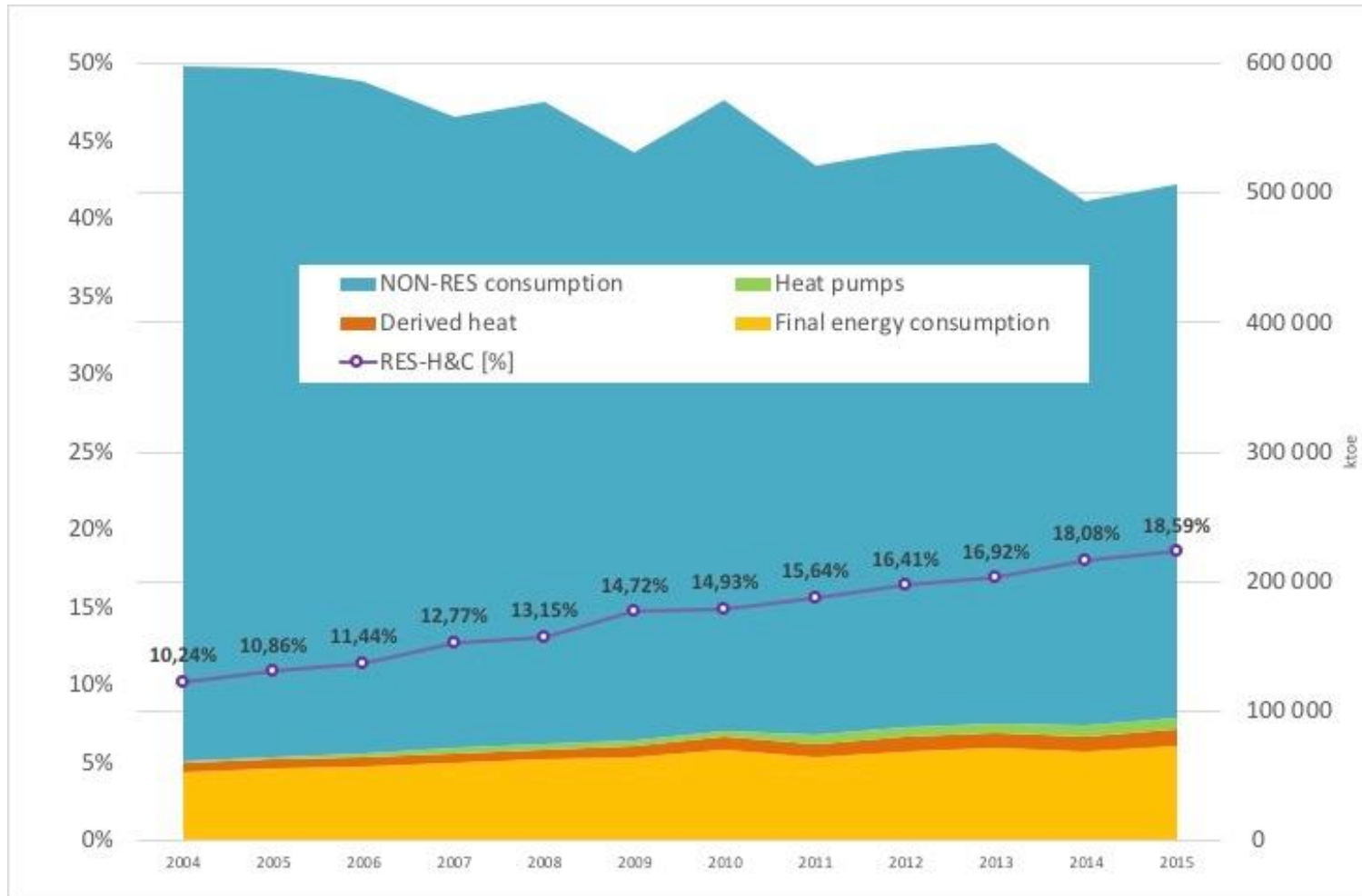
# Endenergieverbrauch EU28 für Wärme und Kälte in allen Sektoren 2012 [total: 12 820 TWh]



Source: Fraunhofer ISI et al. (2016): Report WP 1, p.83

# European Energy Statistics- SHARES Model

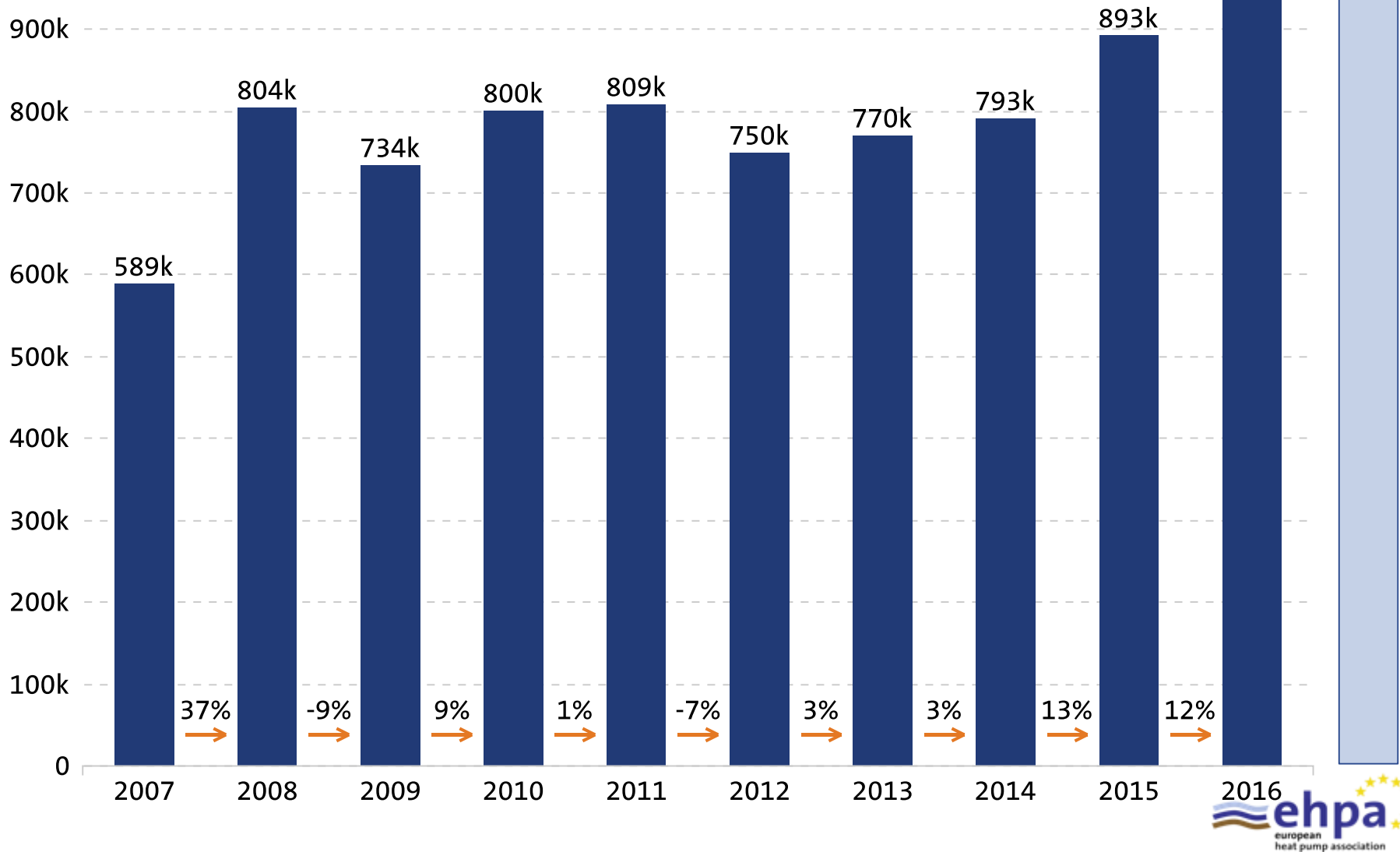
## Erneuerbare Energie aus Heiz- und Kühlprozessen



<http://ec.europa.eu/eurostat/web/energy/data/shares>

# Marktentwicklung 2007 – 2016

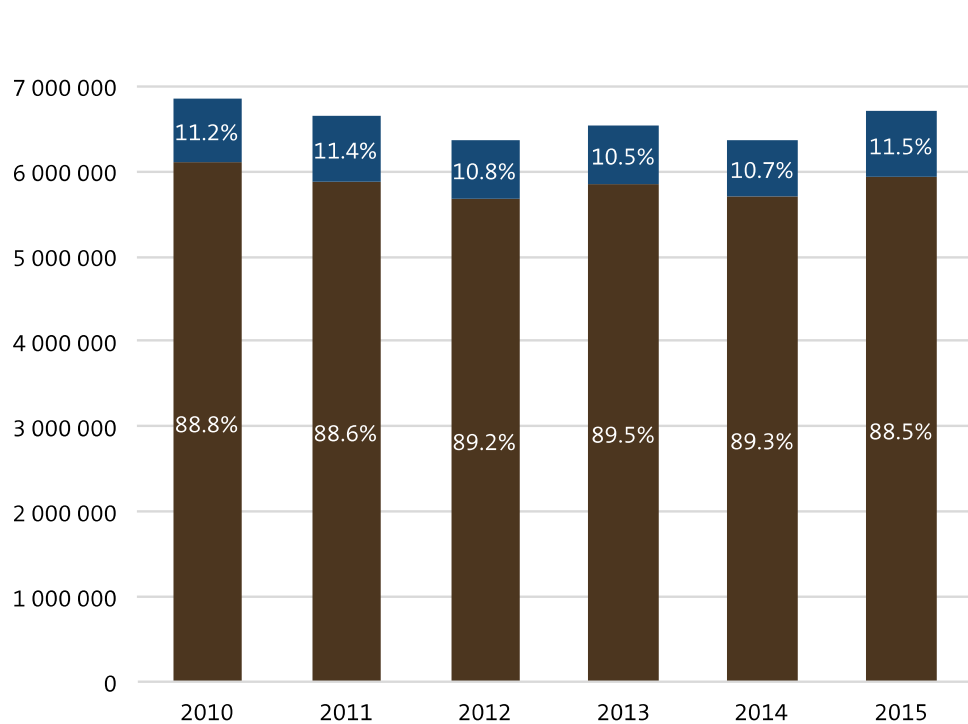
Bestand: 9.5 million Wärmepumpen installiert



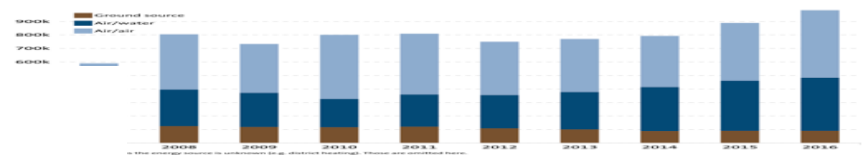


# Marktentwicklung Wärmepumpen und Kessel

6.5 million **Kessel pro Jahr** vs.  
 Wärmepumpenbestand von 9.5 Mil. Einheiten **in Europa**



Source: BRG / EHPA



■ Heating HP  
 ■ Boilers



- **REVISION** Renewable energy sources Directive 2009/28/EU
- **REVISION** Energy performance of buildings Directive (2010/31/EU)
- **REVISION** Energy Efficiency Directive (2012/27/EU)
- **NEW** Energy labelling regulation (2010/30)
- **REVISION** Emission trading scheme (ETS) reform
- **NEW** Directive on common rules for internal electricity market + regulation on mkt
- **NEW** Regulation on Energy Union governance

# Macht Brüssel Energiewende?

- Die EU Kommission macht ambitionierte Vorschläge.
- Die Mitgliedsstaaten tragen diese nicht immer mit.
- Ist die EU Energiewende der kleinste gemeinsame Nenner?

# Renewable energy Directive

Commission	Parliament	Council	
>27%	35% + mandatory national targets	>27%	target
+1pp	+1-2pp Suggestion by rapporteur	./. 1pp as indicative value	Annual increase heating / cooling

- Introduces a focus on heating and cooling
- Introduces use of waste heat to be treated like renewables
- Defines the right for self consumption (→ eMarket design)

## Energy performance of buildings directive

- **Introduces buildings automation and control requirements and inspection requirements**
- **Introduces the idea of „buildings as active nodes in the energy grid“**
  - Charging stations/precabling
  - Demand response
- **Requests MS to set up a long term renovation strategy**



# Energy efficiency Directive

Commission	Parliament	Council	
<b>30%</b> binding	<b>30-40%</b>	<b>30%</b> binding	target
<b>-1,5</b>	<b>-1,5</b>	<b>-1,5</b> Reduced to -1% from 2026	Annual Decrease of final energy

- Energy savings obligation (article 7) shift in baseline
- Primary energy factor: 2.0 with review (but highly disputed)
- Consumer right for accurate energy billing information

# Directive on common rules for the internal market in electricity

- Introduces right to ask for dynamic pricing, either by individual or via aggregator
- Main directive to encourage active customers/prosumers „generate, store, consume and sell self generated electricity
- Support for local energy communities

# Regulation on energy union governance

**Recital 3 (draft):** „The EU should prepare the shift to a highly energy efficient and fully renewables–based energy system at the latest by 2050 and cover 5 key dimensions: energy security, internal energy market, **energy efficiency, decarbonisation** and research/innovation/competitiveness

- **Merges all planning requirements under one legal roof**
  - Reporting template for RES – EE – EPBD
  - Assessment, advice and guidance to MS by Commission
- **Heavy focus on cooperation e.g. permanent energy dialogue with non-state actors**

24-29 November  
Coreper on **Electricity Market**

24.11.17:  
Coreper on  
**RES**

18 December  
**Energy Council**  
(GA on REDII and  
Governance)

**November**

**December**

27 November  
ITRE/ENVI vote  
on **Governance**

28 November  
ITRE vote on **REDII**  
and **EED**

5 December  
2<sup>nd</sup> Trialogue  
**EPBD**

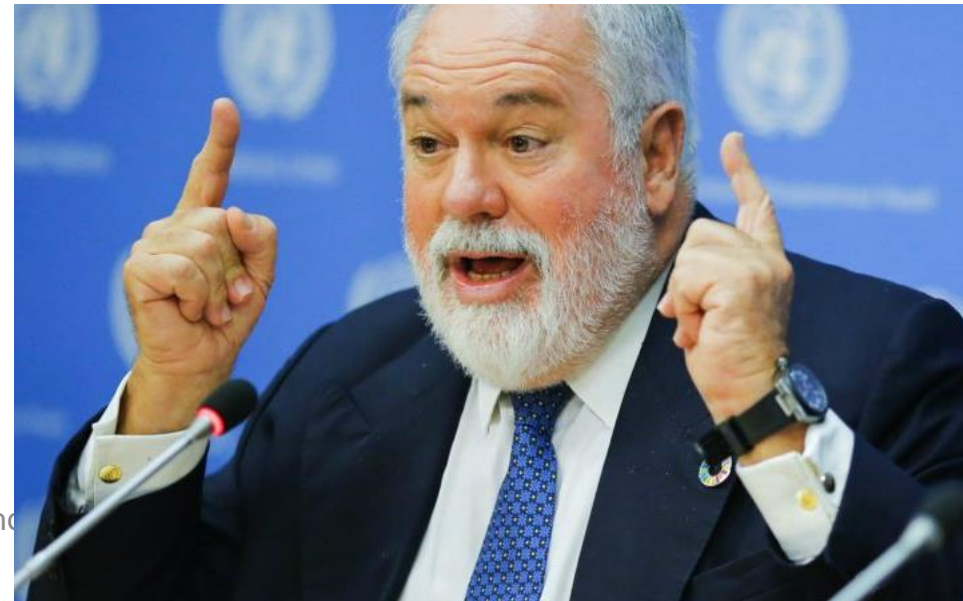
# What next?

- **New study on the lower costs of RES technologies  
==> 30% RES by 2030 is cost efficient**
- **New IPCC report on the implications of a 1.5° C target**
- **Revised EU Energy roadmap 2050**



## EU **low-carbon** Energy roadmap 2050 (under preparation 2018): **100% emission reduction this century**

- “Meeting the Paris goal of keeping climate change well below 2° C – and aiming for no more than 1.5° C – requires bold action, including reaching climate neutrality this century,”
- Carbon neutrality to become a target for 2050
- Commissions work will include “in-depth analysis of the economic, social and environmental transformations needed to inform the political debate in the context of the development of the mid-century strategies,”
- Public consultation in 2018



# Involvement of non-state actors

Heat Transition 2030  
Key technologies for reaching the intermediate and long-term climate targets in the building sector  
SUMMARY

**Agora**  
Energiewende

Fraunhofer IBP    Fraunhofer IWES

geea Die Allianz für Gebäude-Energie-Effizienz    dena Deutsche Energie-Agentur

**GEBÄUESTUDIE**  
Szenarien für eine marktwirtschaftliche Klima- und Ressourcenschutzpolitik 2050 im Gebäudesektor

Eine Studie der dena, der geea und weiterer Verbände aus dem Bereich Gebäudeenergieeffizienz.

Energy Union Choices

**CLEANER, SMARTER, CHEAPER**

Responding to opportunities in Europe's changing energy system

**World Energy Outlook 2017**

International Energy Agency  
Secure Sustainable Together

Home / Interviews / Energy & Environment / Energy / Gas / Gas lobby chief: 'In 2050, 76% of gas could be renewable'

## Gas lobby chief: 'In 2050, 76% of gas could be renewable'

By Frédéric Simon | EURACTIV.com

25 Sep 2017

Supporters



"Power-to-gas is a very energy-intensive process but if you have excess electricity, why not put it to good use?" says Beate Raabe. [© 2017 Eurogas]

Languages: Deutsch    Comments    Print    f 17    in 378    8+    t    m

This article is part of our special report Renewable gas.

The excess wind and solar electricity generated at times of oversupply could be used more systematically to produce synthetic gas, providing a convenient way of storing renewable energy that would otherwise be lost. The potential is huge, and can be used to heat homes during winter, argues Beate Raabe.

Beate Raabe is Secretary General of Eurogas, the trade association representing the interests of the gas industry in Europe.

She spoke to EURACTIV's energy and environment editor, Frédéric Simon, ahead



Advertisement



From Twitter

Robert Hernandez Retweeted  
Sedigas  
#GasRenovable ow.ly/Qm9630ganF8, tema central de la #NewGas4eu que @Eurogas\_Eu celebra ahora. Sabes

**CAN THE CLIMATE AFFORD EUROPE'S GAS ADDICTION?**

FOOSH FREE!    The Green Deal

**Liquid Fuels for Tomorrow's Heat Supply**  
Affordable Solutions for a Successful Energy Transition

A pathway for multi-energy hybrid heating towards 2050

euromfuel  
The European Heating Oil Association





# DECARB HEAT

Acting together to decarbonise Europe

[www.decarbheat.eu](http://www.decarbheat.eu)

# We need to reshape the heating industry ...



HP business models	R&D	“re-design	
	manufacturing	“re-tool	<b>...within 33 years</b>
	installation		
	maintenance	“re-skill	

# The Decarb



# Heat Initiative

**DecarbHeat vision:  
100% decarbonised heating and cooling system in Europe by 2050**

**industry pledge**

**policy  
requests**

**support  
document**

**Industry platform**



# A 100% renewable society is possible – by 2050

Join us at [www.decarbheat.eu](http://www.decarbheat.eu)



# The European Heat Pump Association AISBL

- EHPA is a Brussels based industry association which aims at promoting awareness and proper deployment of heat pump technology in the European market place for residential, commercial and industrial applications. EHPA provides technical and economic input to European, national and local authorities in legislative, regulatory and energy efficiency matters. All activities are aimed at overcoming market barriers and dissemination of information in order to speed up market development of heat pumps for heating, cooling and hot water production.
- EHPA coordinates a quality initiative including a Quality label for heat pumps and Certification standards for heat pump installers. The association compiles the annual heat pump statistics and organizes a number of events, among them an annual heat pump conference.

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