

An aerial photograph of Paris, France, featuring the Eiffel Tower in the center. The city is bathed in the warm, golden light of a low sun, creating a lens flare effect on the left side of the image. The background shows a dense urban landscape with various buildings and green spaces.

**EUR150**  
**trillion**

**Buildings are the  
world's most valuable  
asset class**



# To succeed on climate we must succeed on buildings

44%

of the energy consumed in  
France come from the  
building sector

French Ministry, Ministère De  
La Transition Écologique, 2017

~1/4

of national emissions comes  
from buildings

French Ministry, Ministère De  
La Transition Écologique, 2017





# **Renovation** is essential to deliver the French 2050 climate neutrality goal

**94%**

reduction in GHG emissions compared to 2015

Source: BPIE Report: The Road to Climate-Neutrality, March 2021

**41%**

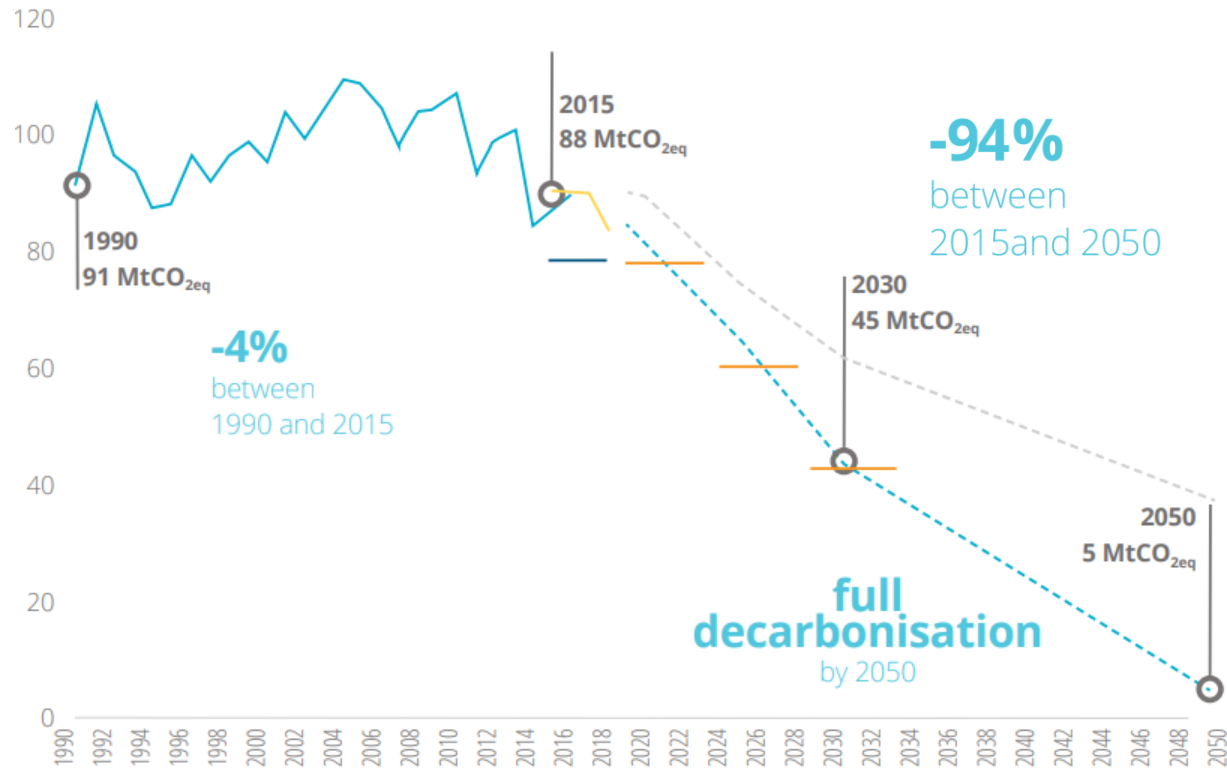
reduction in energy consumption compared to 2015

Source: BPIE Report: The Road to Climate-Neutrality, March 2021



# Roadmap of France

**Figure 7:** History and projection of emissions from the French building stock between 1990 and 2050, in MtCO<sub>2</sub>eq. (Source: French LTRS).<sup>28</sup>



- Historical emissions (2018)
- Historical emissions (2019)
- - - Trend scenario with present measures
- - - Revised SNBC scenario (carbon-neutrality)
- 1<sup>st</sup> indicative sectoral carbon budget, adopted in 2015
- Next 3 sectional carbon budgets, revised SNBC

## Action 1 Prioritise

Make the energy renovation of buildings a national priority

## Action 2 Scale

Scale up housing renovation and fight energy poverty

## Action 3 Accelerate

Accelerate the renovation and energy savings of tertiary buildings

## Action 4 Strengthen

Strengthen skills and innovation

Source: BPIE Report: The Road to Climate-Neutrality, March 2021





**65%**  
Are unfamiliar with available support for energy renovation

# Renovation gap

**Challenge:** What motivates the French the most when renovating their homes?

*Source: Cofidis / Institut CSA survey, 2020*



**Work in progress:** Government policy is to boost interest in deep renovation through effective incentive schemes. Focus is shifting from smaller superficial retrofits to in-depth renovations, and more controls are being put in place to check installation and product quality. There are plans for a nationwide network of one-stop-shops to match up projects, finance and qualified workers.





It's  
time

# Support

the general public on renovation programmes to achieve better indoor air quality, fire safety, energy savings, acoustics, durability and property value

# Connect

homeowners with a high quality installer network – and provide installers with accredited trainings to ensure high quality renovations

# Push

for effective regulatory structures at national and EU levels to prioritize the building sector - representing **36% of greenhouse gas emissions** in the EU

Source: BPIE Report: The Road to Climate-Neutrality, March 2021

**Thank  
you**

# Five ways ROCKWOOL takes climate action

1.

Insulation  
to combat  
climate change



Buildings currently account for  
**30%**  
of the world's energy demands

Source: IEA World Energy Outlook 2017

2.

Improves urban  
safety and  
comfort



More than  
**50%**  
of today's buildings will still be in use in 2050

IEA (2013) Transition to Sustainable Buildings - strategies and opportunities to 2050

3.

Creates a more  
sustainable  
future



The building sector produces  
**1/3**  
of all waste

Source: European Commission (DG ENV) (2011)

4.

Improves  
health and  
quality of life



One dollar spent on renovation can cut healthcare costs by  
**42**  
CENTS

Source: European Commission, 2016 & Vermont Weatherization Program, 2007

5.

Minimising  
impact from  
operations



**CO2 emissions saved during product lifetime of building insulation is**  
**x100**  
**times the emissions in production**

Source: Sustainability Report 2019



# LOGSTOR - the highest level of environmental care.

District Heating as the major playground for energy efficiency improvement.  
Input to the Polish National Recovery Plan.

**Andrzej Rokosz**  
*Vice President, Sales Central Europe & Export*



**RECYCLE**  
LOGSTOR

**LOGSTOR**



## Poland's District Heating (as of 2019)



### Key data

- 396 District Heating companies
- 21.701 km of network
- 68 million ton of CO<sub>2</sub> emission per anno (*21% of Poland's total*)
- 12,5% of heat losses in the network (*33.548 TJ or 8,5 Mt of CO<sub>2</sub> per anno* )

Poland's target is to reduce CO<sub>2</sub> emission by 120 Mt per anno until 2030 (450 Mt in 1988 => 320 Mt in 2019 => 200 Mt in 2030).

How can District Heating contribute to achieving this ambitions target?



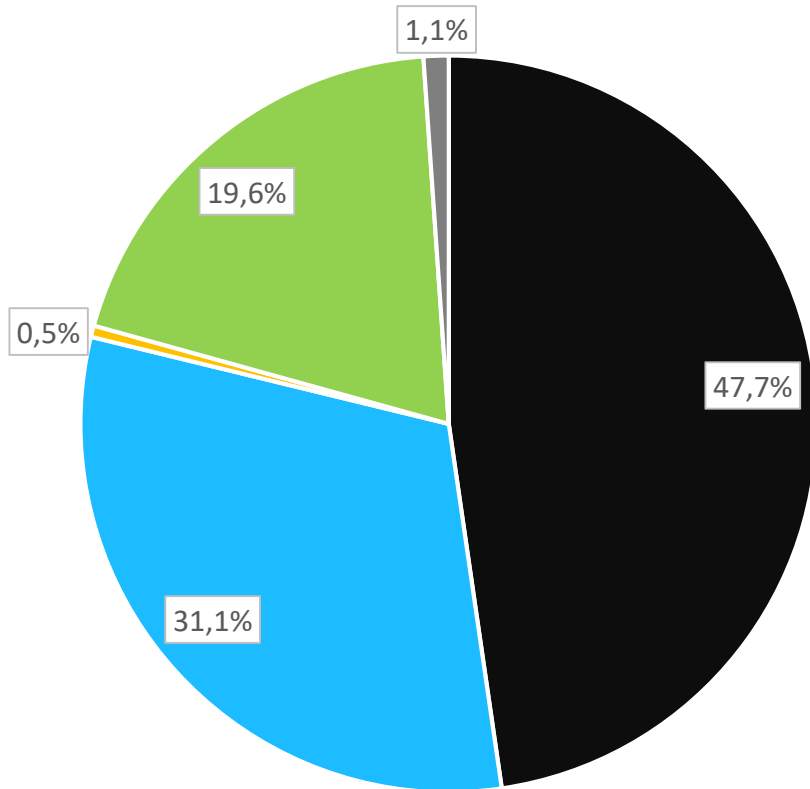
## Financial impact of CO<sub>2</sub> European Emmission Allowances price increase (€/t)



- District Heating companies – huge extra cost undermining current budgets
- Consumers – eventually this huge extra cost is to arrive in their bills (once approved by regulatory body)
- Price forecast – EU Allowances are expected to average 39.24 €/t in 2021 and 46.24 €/t in 2022, according to a Reuters survey of eight analysts.

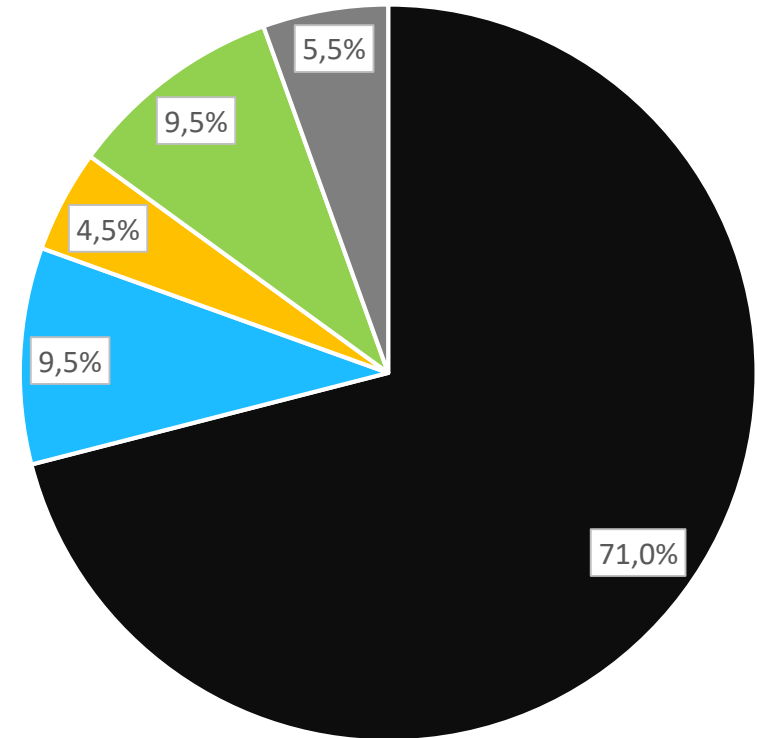
# Coal is king, still

76% of Poland's Heat Consumption  
Individual Heating by Fuel



■ Coal ■ Gas ■ Oil ■ Renewables ■ Other

24% of Poland's Heat Consumption  
District Heating by Fuel



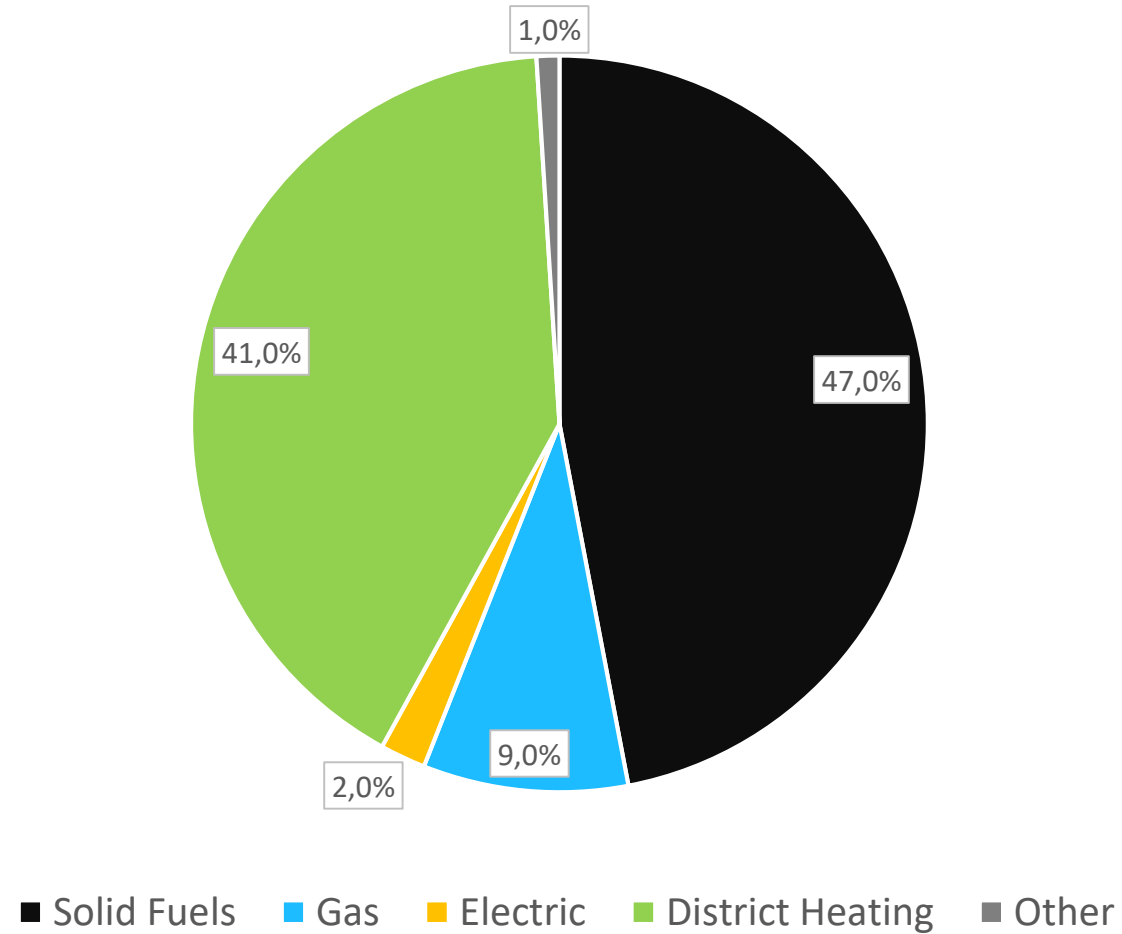
■ Coal ■ Gas ■ Oil ■ Renewables ■ Other

District Heating – replace coal by other fuels (CO<sub>2</sub> emission reduction)  
Individual Heating – eliminate coal by connecting to District Heating (CO<sub>2</sub> and Low-stack emission reduction)



# Households

Poland's Households Heating by Source



Eliminate solid fuels by connecting households to District Heating (CO<sub>2</sub> and Low-stack emission reduction)

## CO<sub>2</sub> reduction

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District Heating is the optimum solution, especially when multiple heat sources are used, including all kinds of renewable energy sources, such as:

- Geothermal and thermal sun
- Electricity from sun and wind to run large heat pumps, especially in periods with surplus electricity supply
- Surplus heat from industry and datacenters
- Waste heat – after sorting

District Heating brings large added value:

- Advanced transmission and distribution lines can cut the heat loss by half compared to existing network
- Increased digitalization can reduce the loss further
- Less heat loss means less air pollution (less production)
- Reduced consumer prices





## Job creation

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District Heating sector in Poland employs 29.000 people today (not including external designers, contractors, service, etc.) Increased renovation and expansion can double this number by creating jobs for highly qualified staff.

- New job in the whole value chain
- Education is essential
- Skilled labor force including re-certification and continuing education



# Conclusion

Renovation of transmission and distribution lines with preinsulated pipes.

Reduce the heat loss by 50%  
(4-5 Mt of CO<sub>2</sub> per anno).

Reduce air pollution since less production will be needed – change from fossil based fuels to renewable energy sources.

LOGSTOR is happy to assist by helping to optimize system design and delivering top quality products

Expansion of District Heating Network in order to connect additional users, both households and commercial buildings.

Reduce CO<sub>2</sub> and Low-stack emission  
(12-15 Mt of CO<sub>2</sub> per anno).

In the implementation of the recovery plan, the eligibility of financial support should be guided by Total Cost of Ownership.

Thank you!

Contact details:  
[www.logstor.com](http://www.logstor.com)

