



The impact of building sector on global emissions

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step by step
renovation
towards nearly
zero energy
SPORT buildings

Introduction

- The Paris Agreement
- How does it affect us?
- The role of buildings
- What do we need to do?

Who is CAN-Europe?



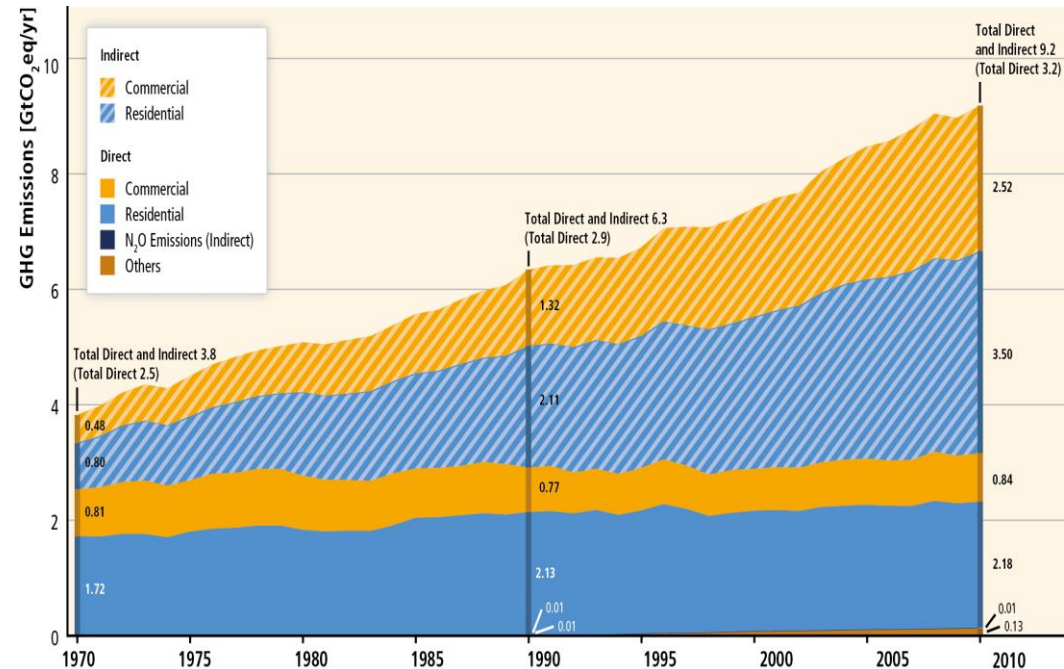
The Paris Agreement – Key outcomes

- All countries acting – Intended National Determined Contributions (INDCs)
- Well below 2°C, **pursue efforts to 1.5°C**
- Global emissions to net zero during the 2nd half of the century
- Reviews of targets every 5 years
- Revision of current inadequate National Determined Contributions - NDCs (+3°C)
- Shifting financial flows



The role of buildings – share in emissions

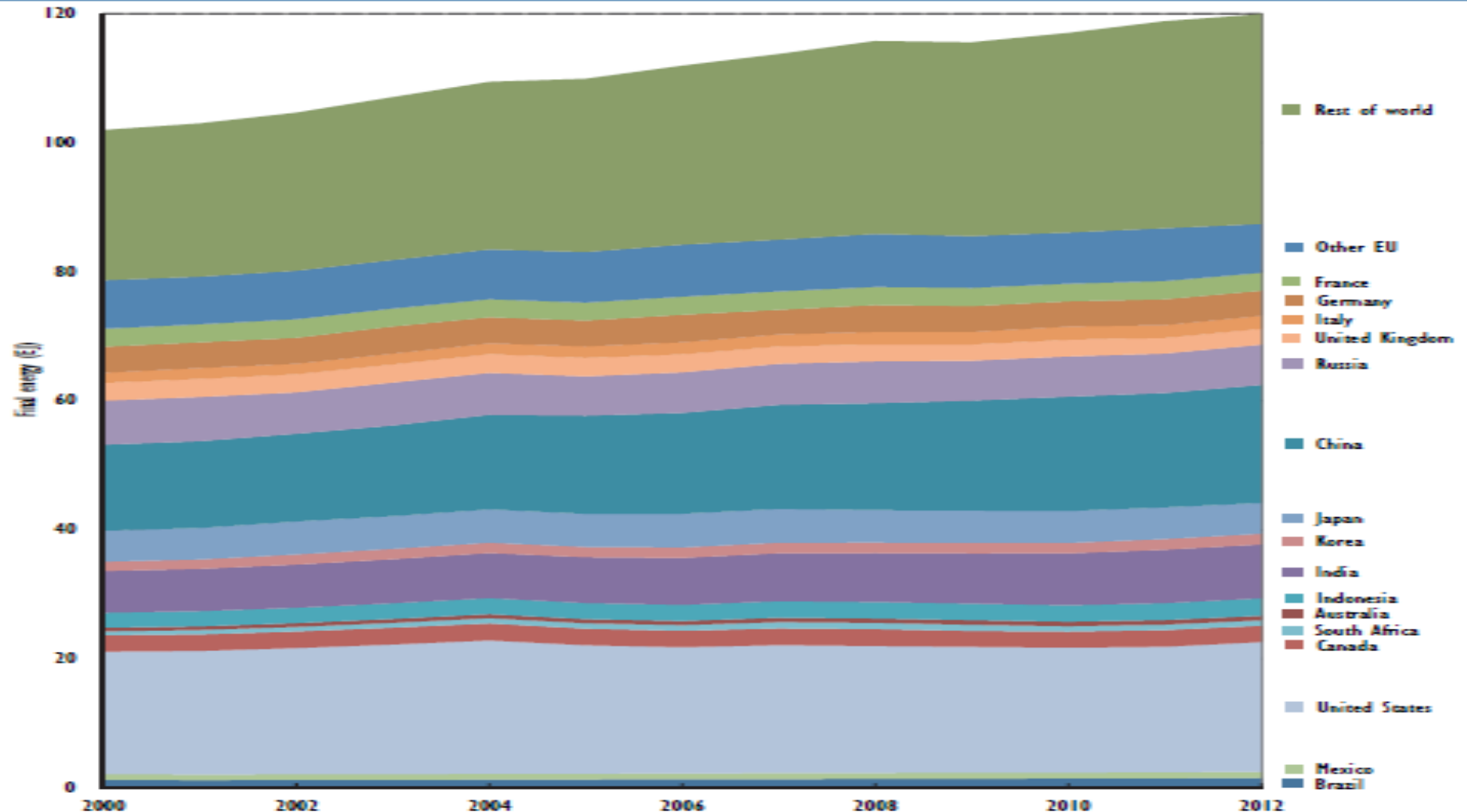
- Buildings account for 32% of global final energy use and for 19% of greenhouse gas emissions, (9 GtCO₂e / year)
- Without further action, global building final energy use may double or potentially even triple by mid-century



Source: IPCC, 2014

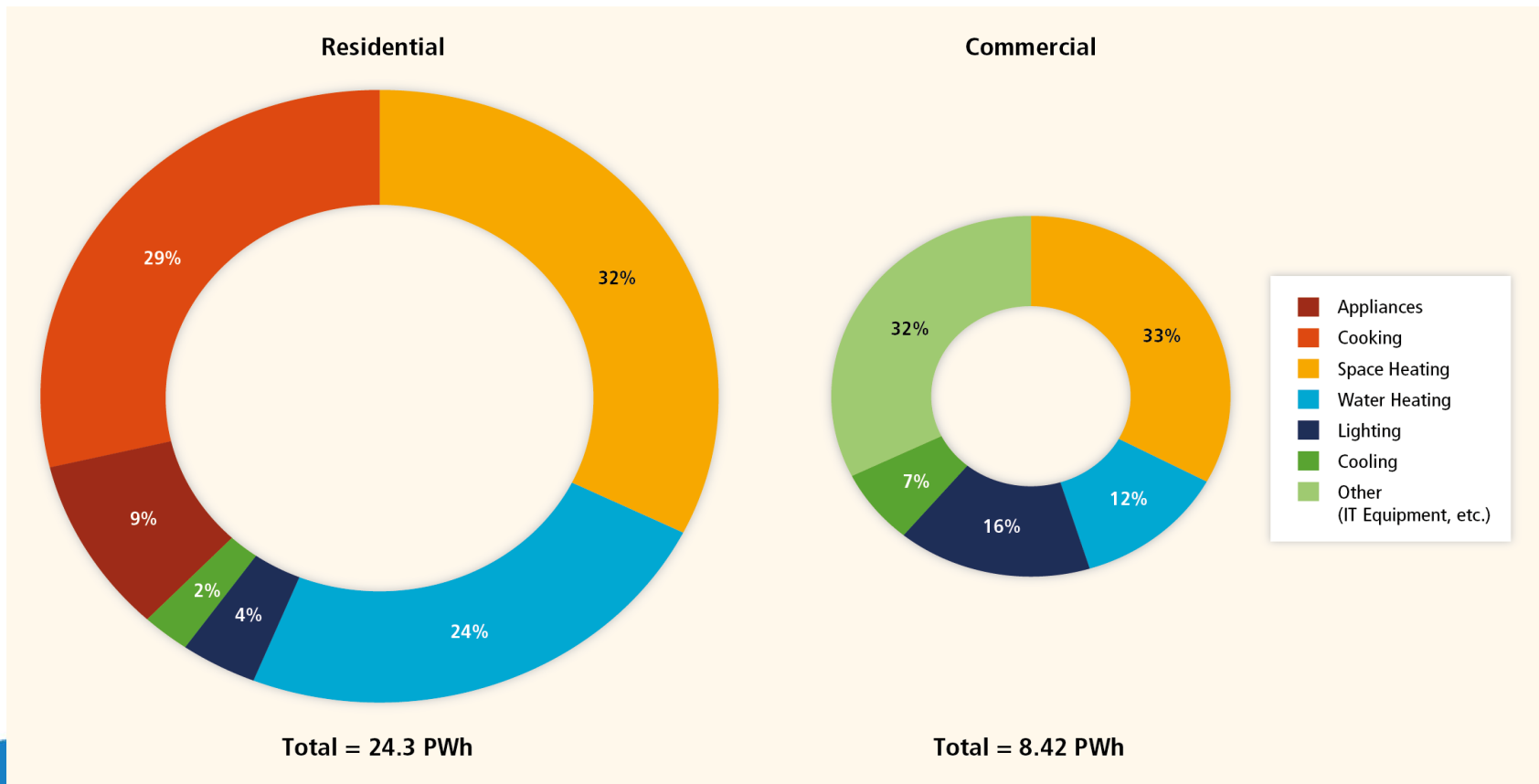
The role of buildings – countries' trends

Figure 1 • Total building energy use in MEF economies and the world, 2000-12



The role of buildings – energy use

Similarities and differences in energy use for commercial and residential buildings



Contribution of buildings in the emission reductions

- The potential is enormous. For example, two-thirds of the world's buildings being built today do not have codes or standards
- Not many studies exist for the 1.5°C pathways but recent estimates refer to direct emission reductions in the building sector of up to 90% below 2010 levels by 2050
- All new buildings are zero-energy buildings by 2020/2025.
- Deep renovations
- A >3% renovation rate per year

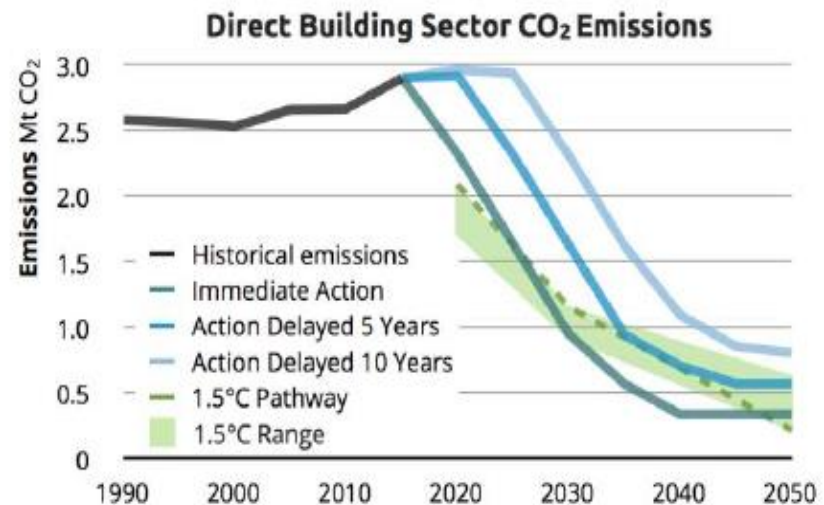


Figure 5 - 1990–2050 direct building sector emissions in three scenarios compared to 1.5°C³⁷ (for methodology see Annex A)

And the EU?

- Energy efficiency is improving and emissions are reducing but not at the pace we need
- The current framework moves to the right direction (e.g. NZEB for new buildings) but insufficient (e.g it does not tackle the issue of how to increase renovations)
- Renovation rates are currently too low (~1%) and the depth of renovation too shallow

Closing the energy efficiency gap

- Put in place appropriate targets that are consistent with the Paris Agreement i.e increase the climate and energy targets for 2030
- Improve the current policy framework to ensure that the energy saving potential of the building sector is grasped (EPBD, EED proposals)
- Build on best practices and lessons learnt from projects like the STEP2SPORT project
- Keep exploring different financial options to facilitate implementation



Thank you for your attention!