



# Users TCP Academy

1<sup>st</sup> December 2021



# Recent IEA Analysis from the Energy Efficiency Market Report 2021

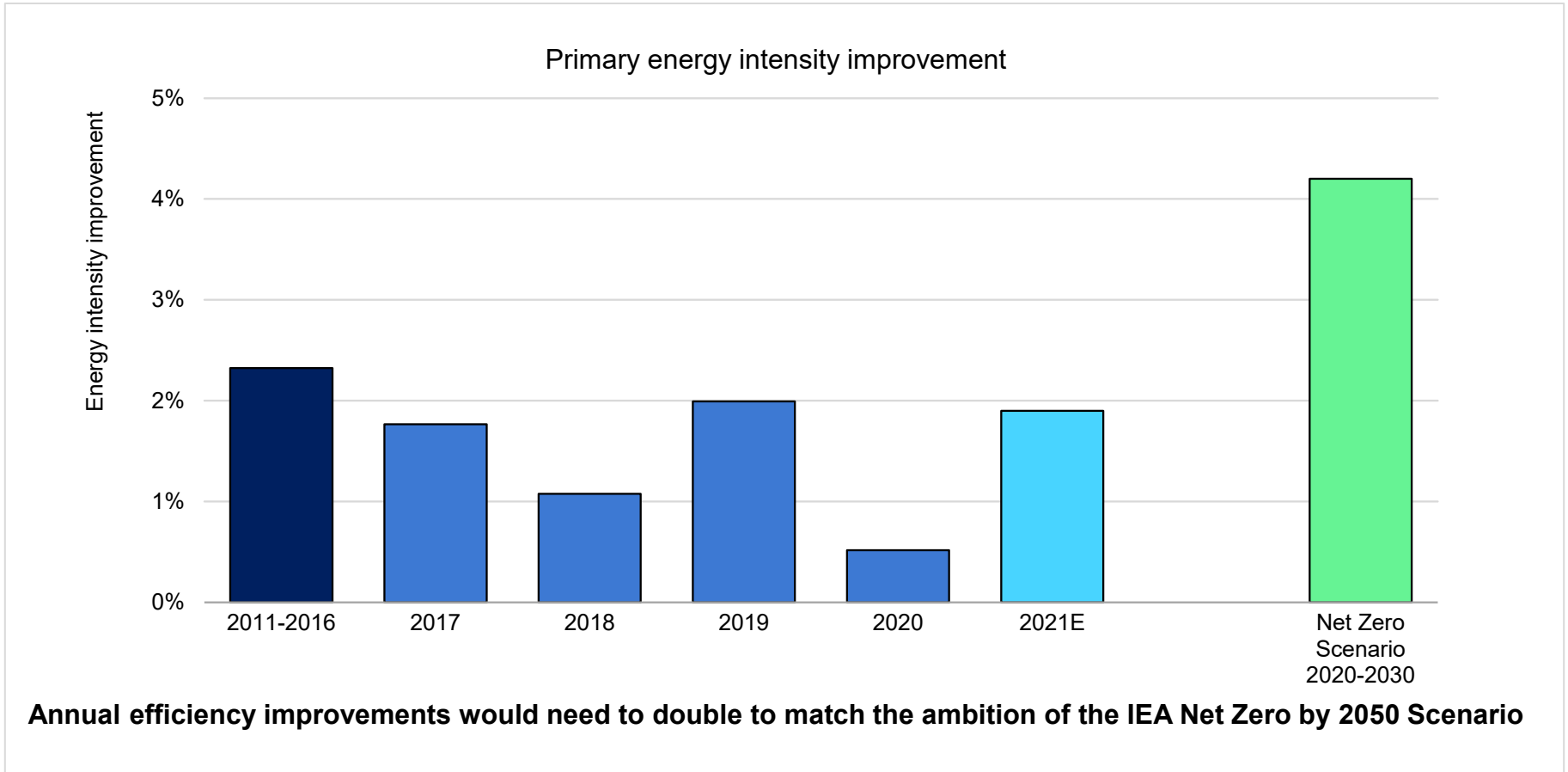
Nicholas Howarth, Energy Efficiency Policy Analyst, Energy Efficiency Division

Emi Bertoli, Energy Analyst, Energy Efficiency Division

1. Recent trends in energy efficiency markets
2. Role of energy efficiency in delivering net zero by 2050
3. Deep dive into digital energy efficiency markets

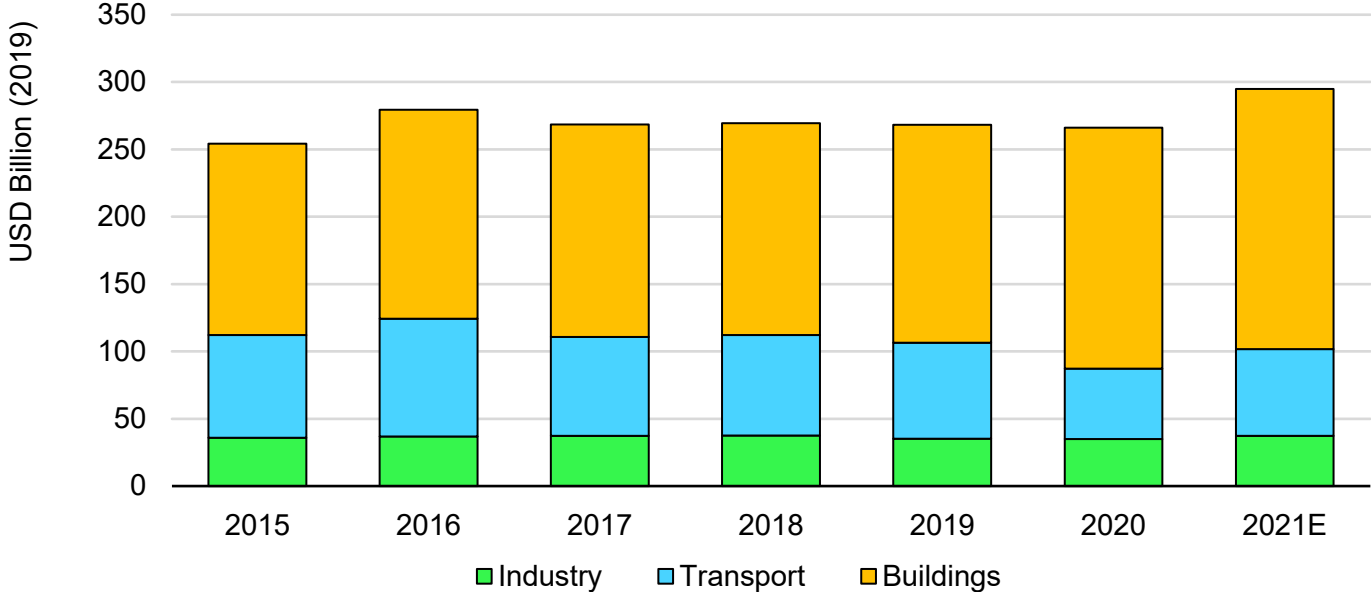
1. Recent trends in energy efficiency markets
2. Role of energy efficiency in delivering net zero by 2050
3. Deep dive into digital energy efficiency markets

# Efficiency progress recovering after slowest year in a decade



# Recovery spending and stronger policies lift efficiency investment

Energy efficiency investment, 2015 - 2021

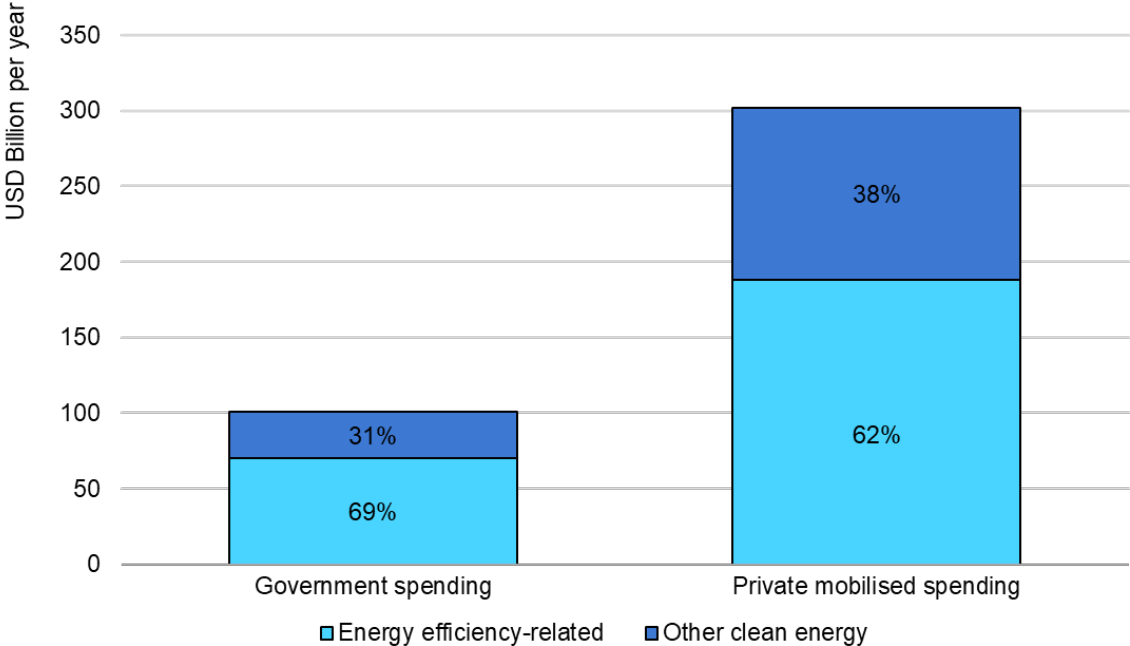


**A net zero pathway requires a tripling of annual efficiency investment by 2030**

# Efficiency makes up two-thirds of clean energy recovery spending

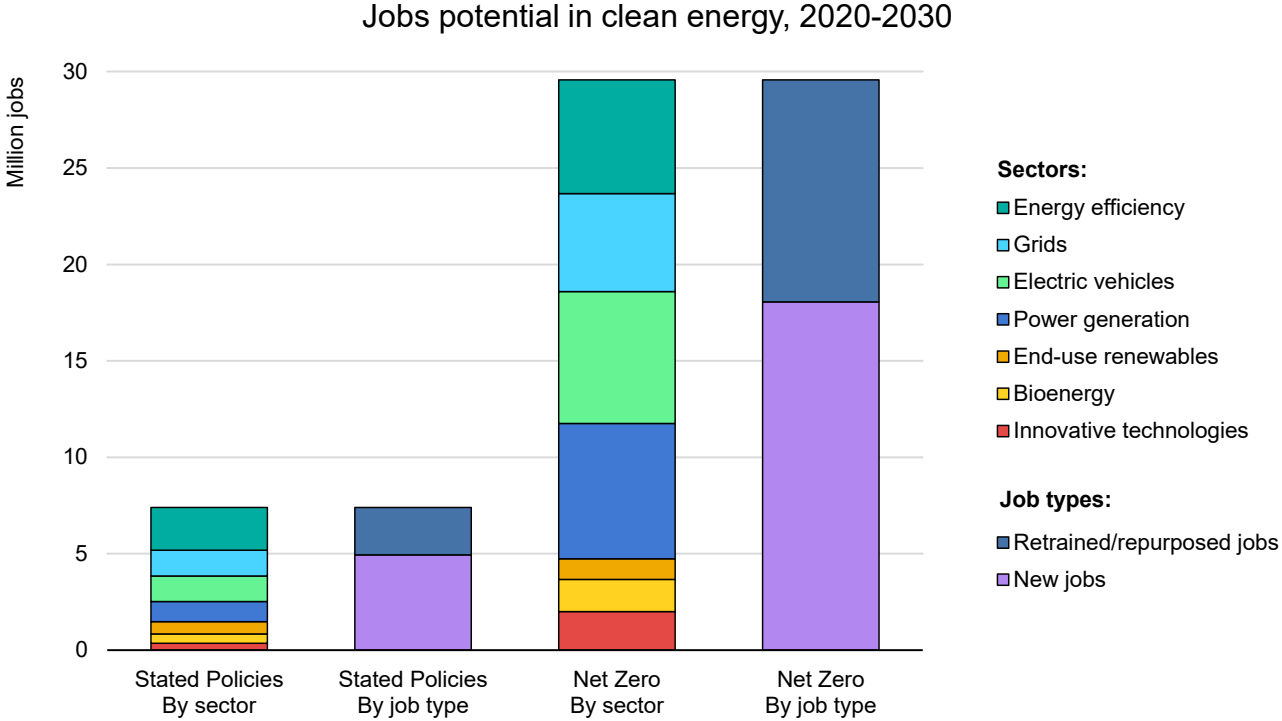


Announced energy efficiency and other clean energy economic recovery spending 2021-2023



**However, spending plans are regionally unbalanced, centred on a small number of advanced economies**

# Enhanced efficiency investment can add 4 million jobs by 2030

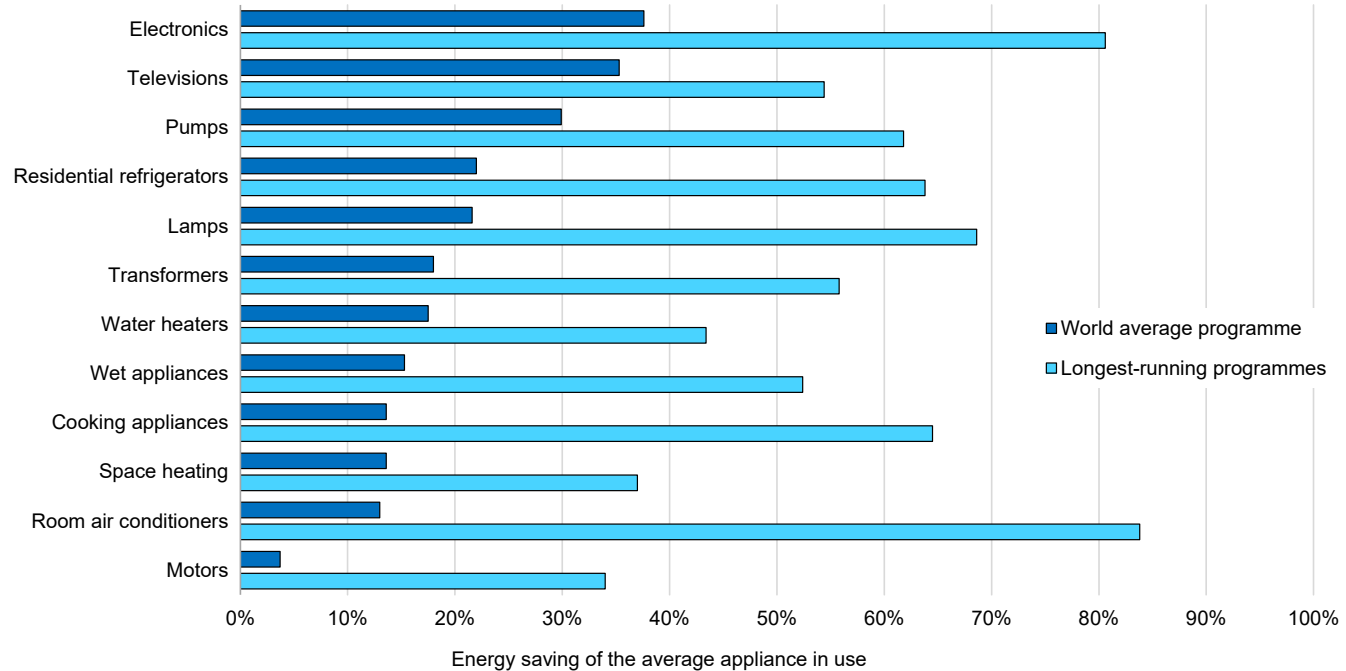


**Efficiency investment provides strong social benefits, lowering energy bills and improving the comfort and quality of housing as well as helping modernise and lift the competitiveness of industry**



# Efficiency policies have delivered substantial energy savings

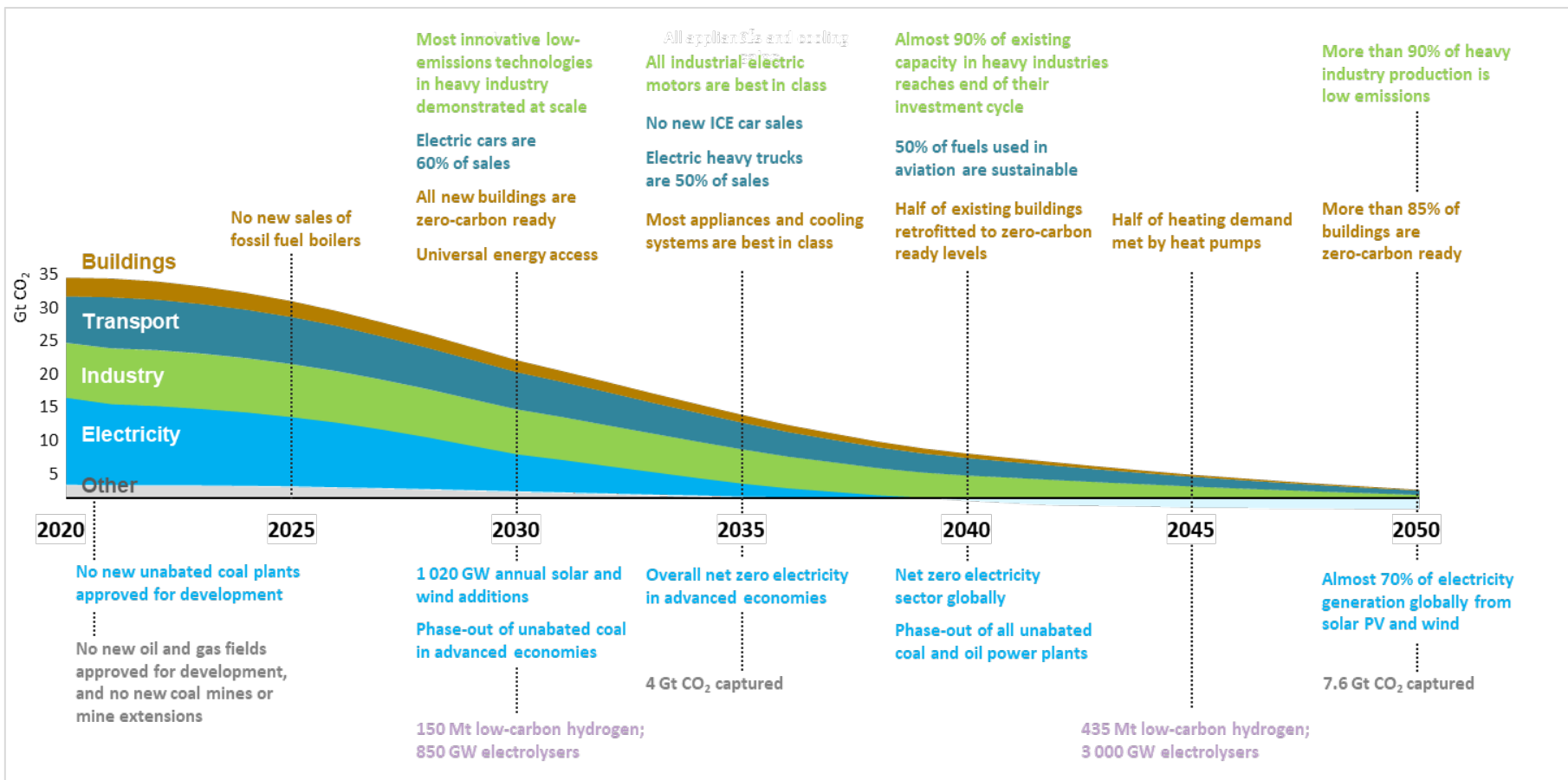
Average appliance energy savings over life of the programme



**The longest running efficiency programmes have reduced appliance energy consumption by over half**

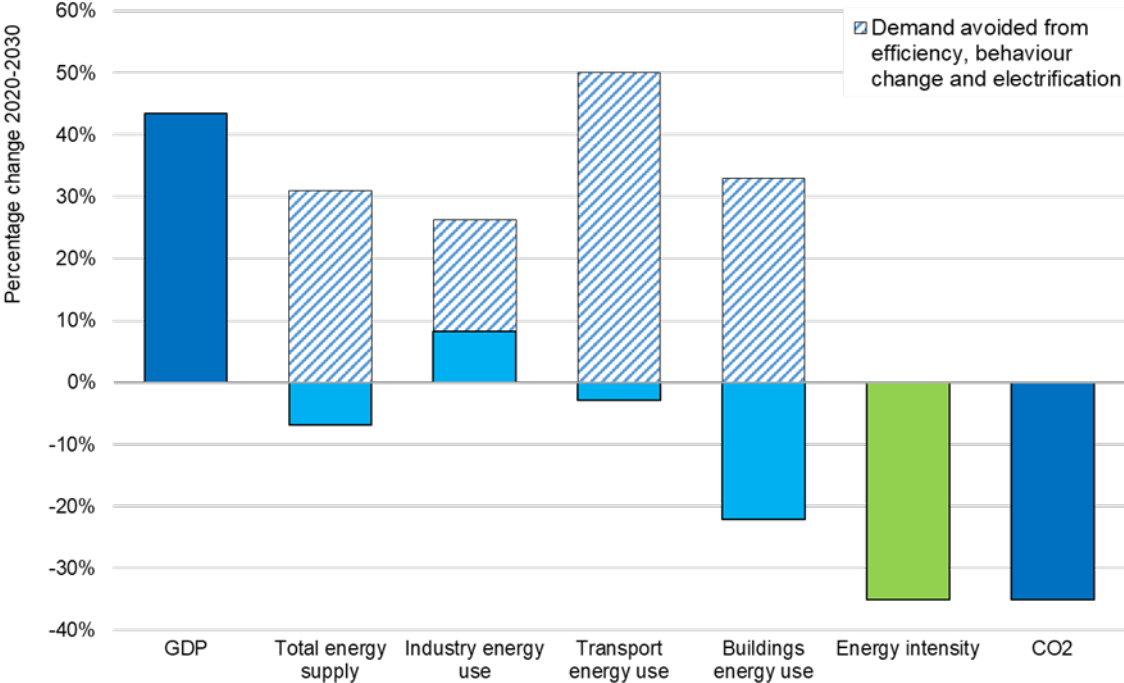
1. Recent trends in energy efficiency markets
2. Role of energy efficiency in delivering net zero by 2050
3. Deep dive into digital energy efficiency markets

# Over 40 efficiency milestones on the road to net zero emissions



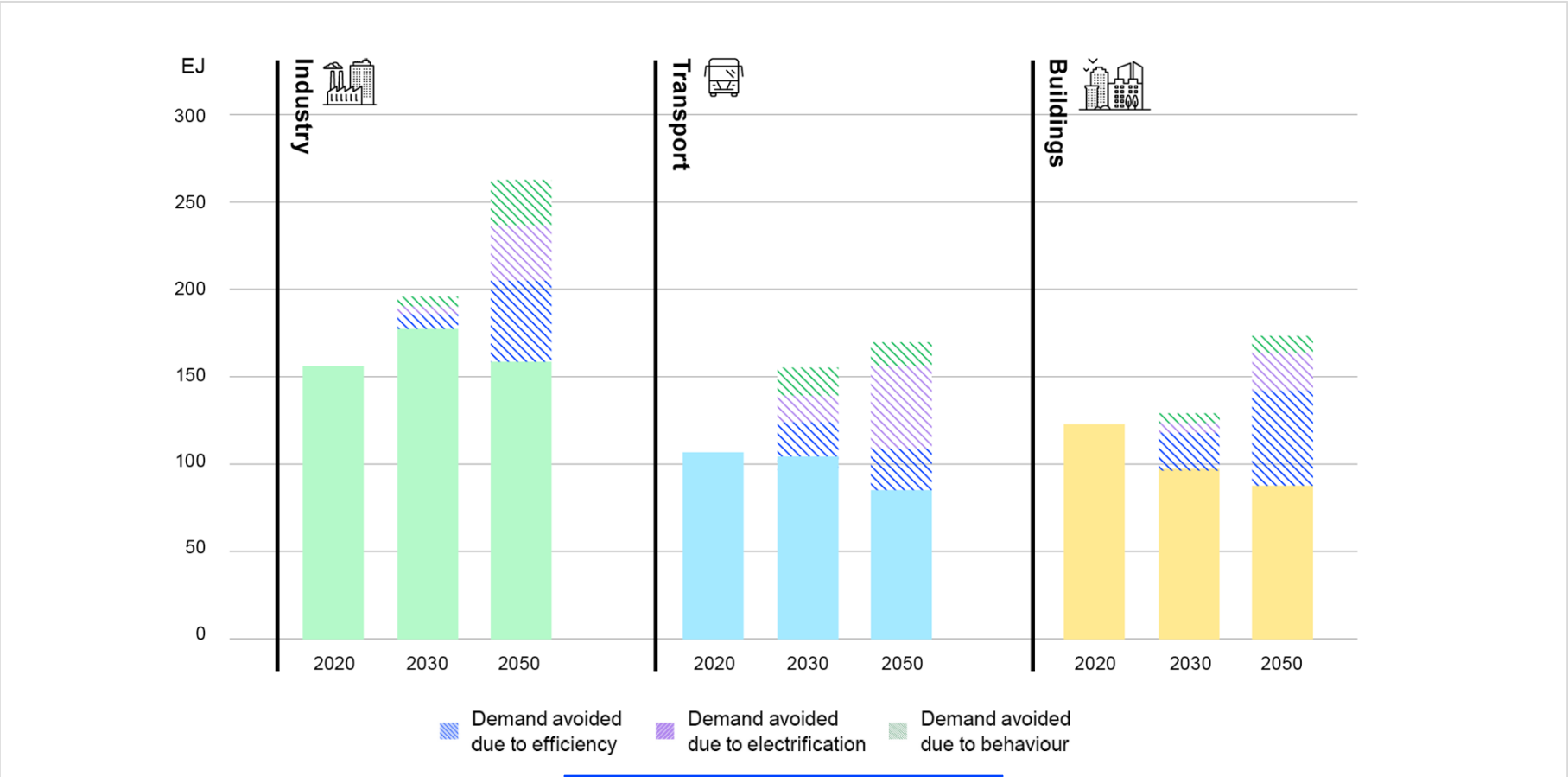
# By 2030, the economy could grow by 40% using less energy than today

Key energy and economic trends in the Net Zero pathway, 2020-2030



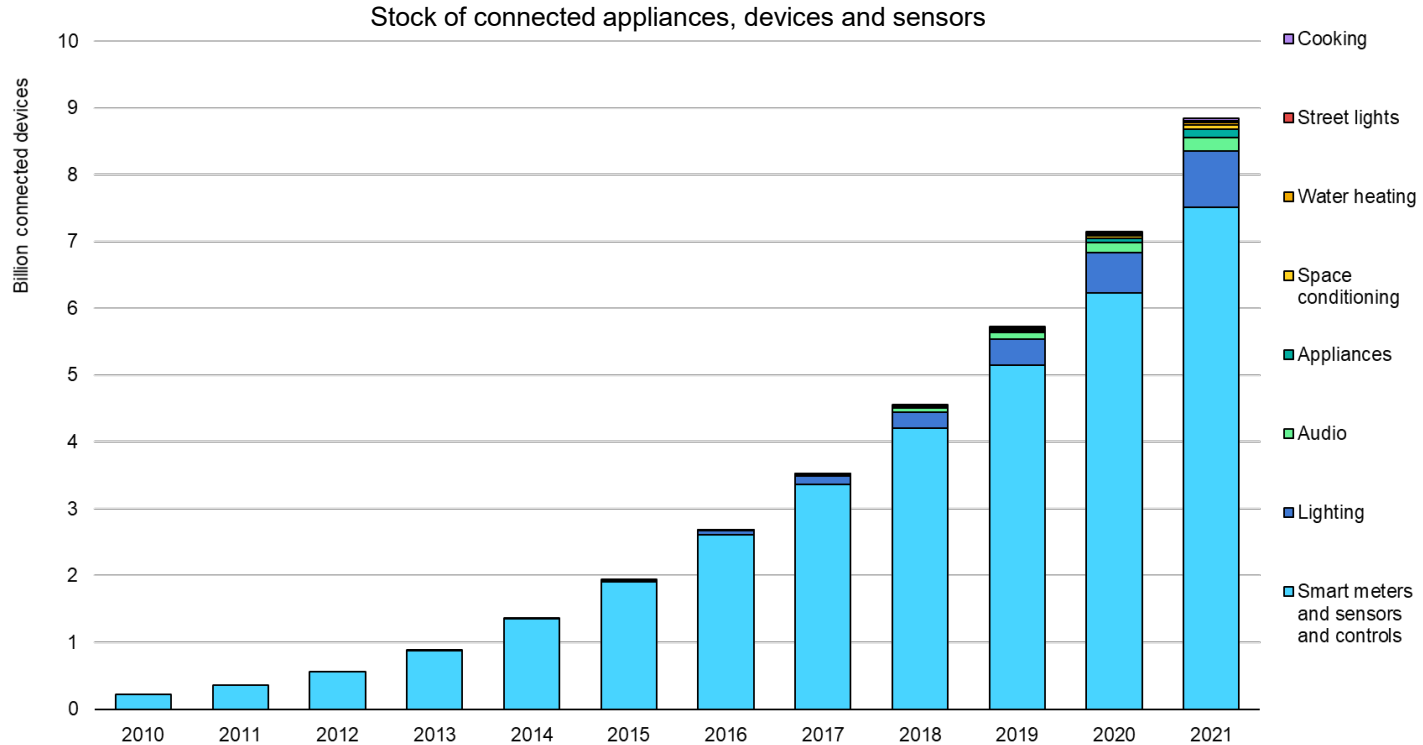
**Energy efficiency is an early priority for action in the IEA Net Zero pathway**

# Energy demand 30% higher in 2030 without NZ efficiency gains



1. Recent trends in energy efficiency markets
2. Role of energy efficiency in delivering net zero by 2050
3. Deep dive into digital energy efficiency markets

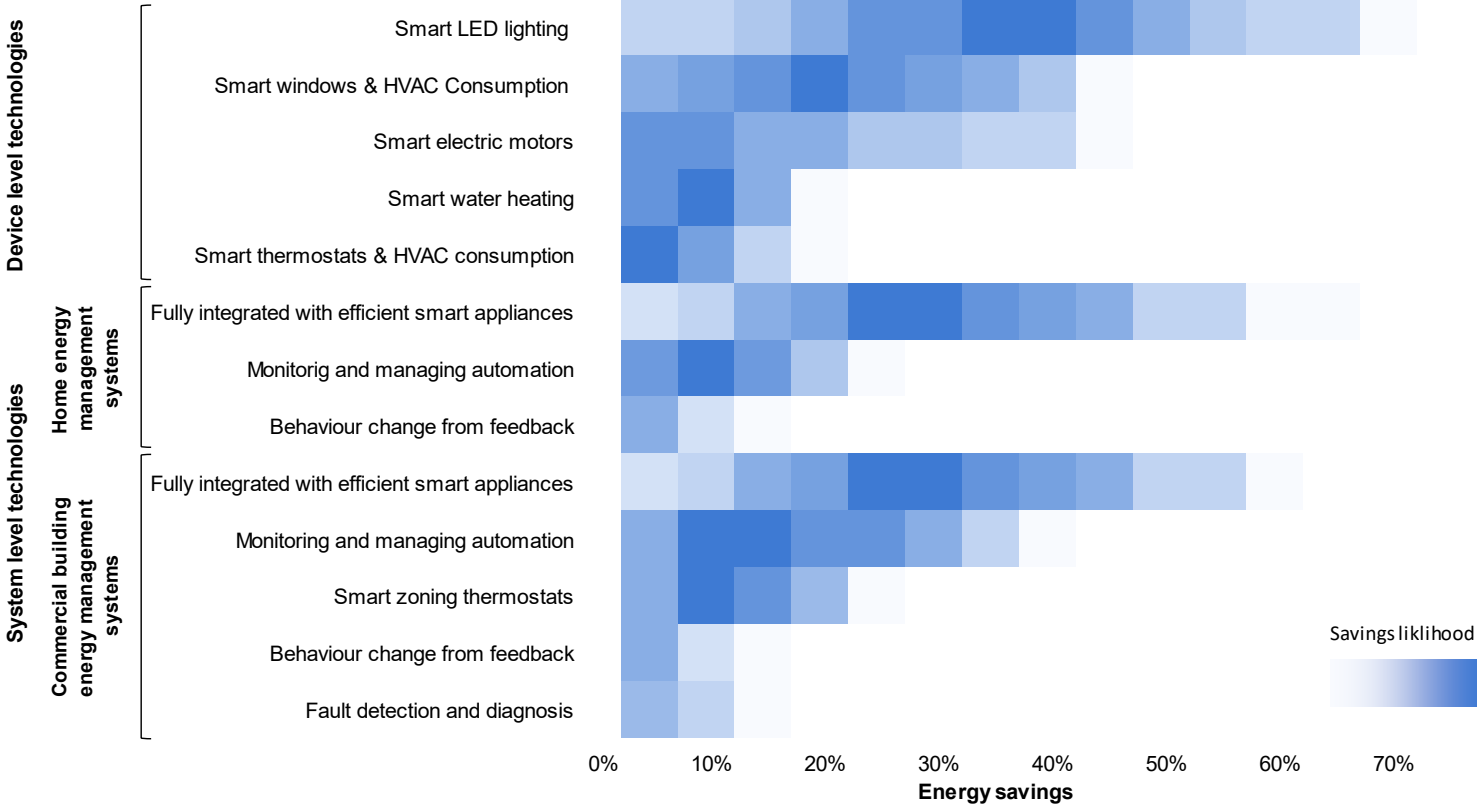
# Rapid digital technology deployment takes efficiency to new levels



**Connected technologies are enabling efficiency across end-uses and systems**

# Digital solutions deliver significant energy savings

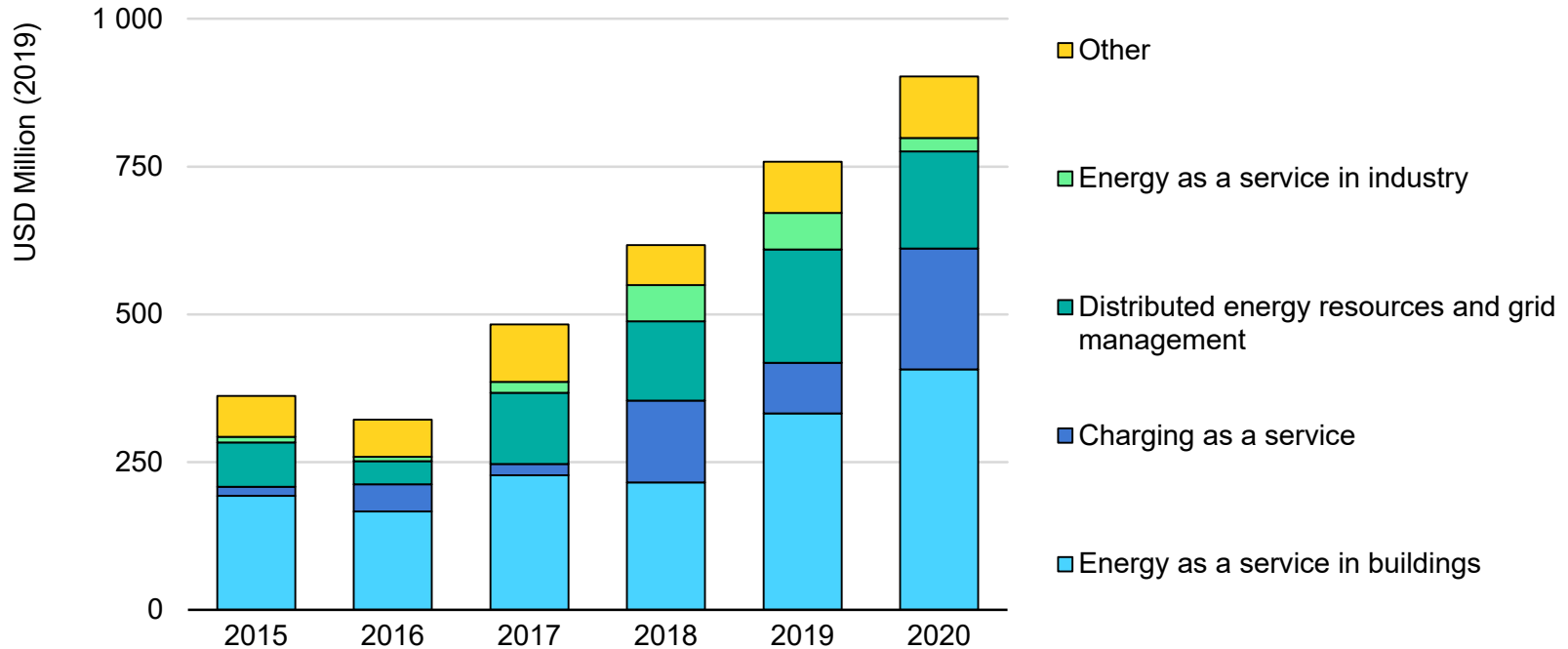
Digitally enabled energy savings potentials based on case studies





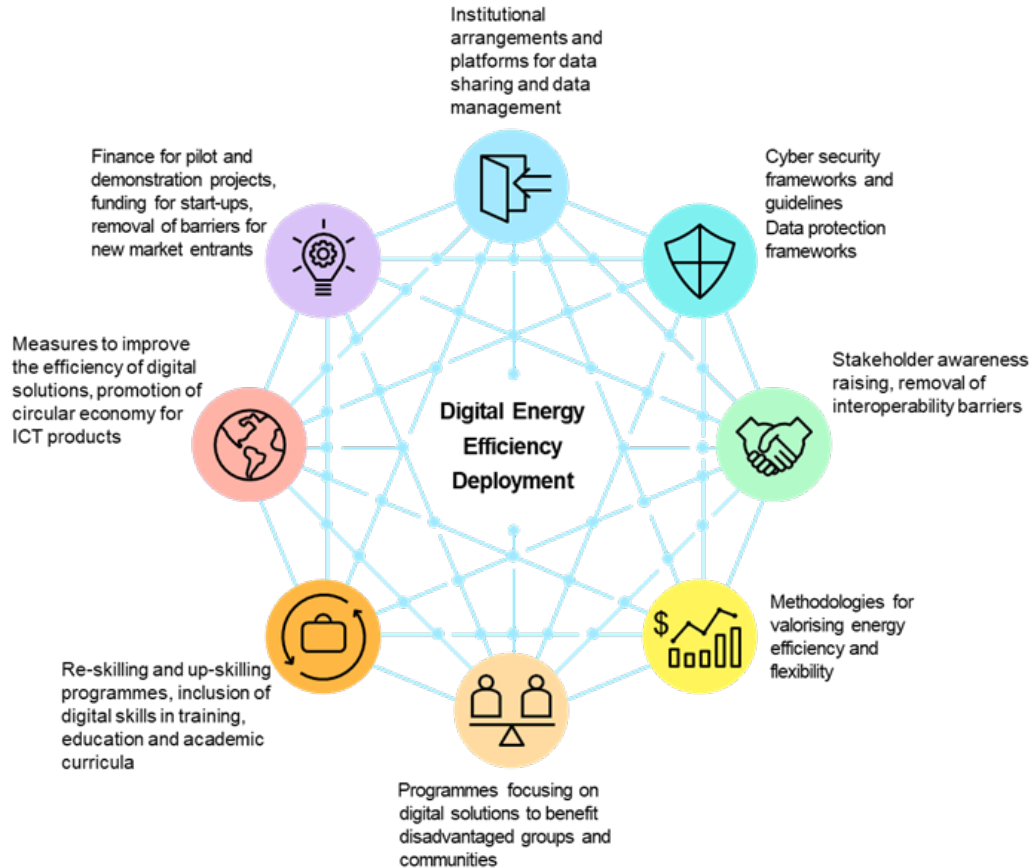
# Investments in digital efficiency are on an upwards trajectory

Global early-stage venture capital investments in efficiency start-ups



**The number of digital energy start-ups reached 64% of total global energy start-ups in 2020**

# Policy action is needed to boost deployment and counter risks





Ministers and policymakers from: Austria, Belgium, Canada, Chile, China, Colombia, Denmark, France, India, Indonesia, Italy, Japan, Mexico, Oman, Norway, Panama, Poland, Senegal, South Africa, Spain, Switzerland, United States, European Commission, the Vatican and the Prime Minister of Guyana.

Representatives from labour, youth, access, civil society

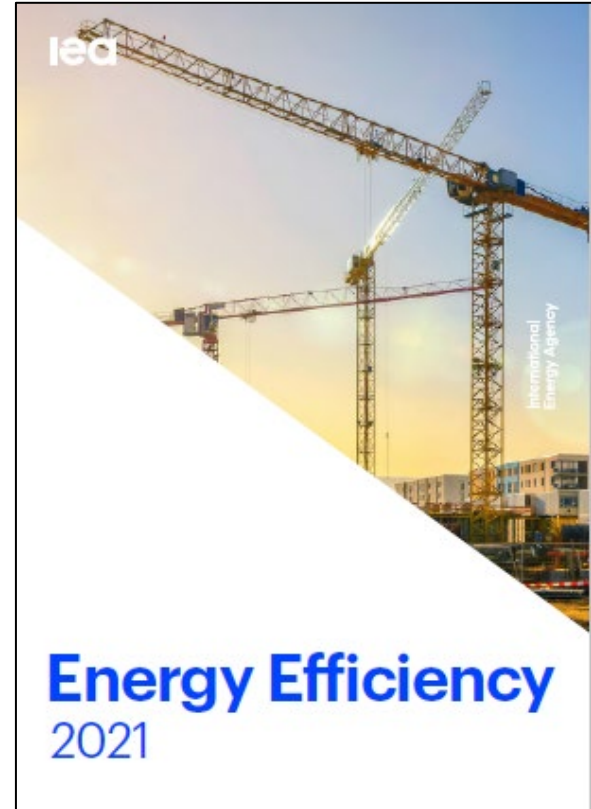
The Commission has made [12 key recommendations](#) across the themes of employment, development, equity and participation

- Global energy intensity expected to recover in 2021 after the worst year in a decade
- IEA net zero scenario sees energy efficiency progress doubling in this decade
- Efficiency features strongly in economic recovery measures, but total investment needs to triple this decade
- Efficiency policies are proven to benefit people, create jobs and lower emissions
- An urgent focus on energy efficiency is a vital component of climate action
- Digitalisation can contribute to scaling up energy efficiency implementation and to expanding the scope of energy efficiency in support of efficient power system operation

Report available for free download at:

[www.iea.org](http://www.iea.org)

Submit your questions to: [energy.efficiency@iea.org](mailto:energy.efficiency@iea.org)



iea