



DEVCO Environment and Climate Week 2020

17-21 February 2020
Brussels, Belgium

Sustainable Energy: Introduction to Energy Efficiency

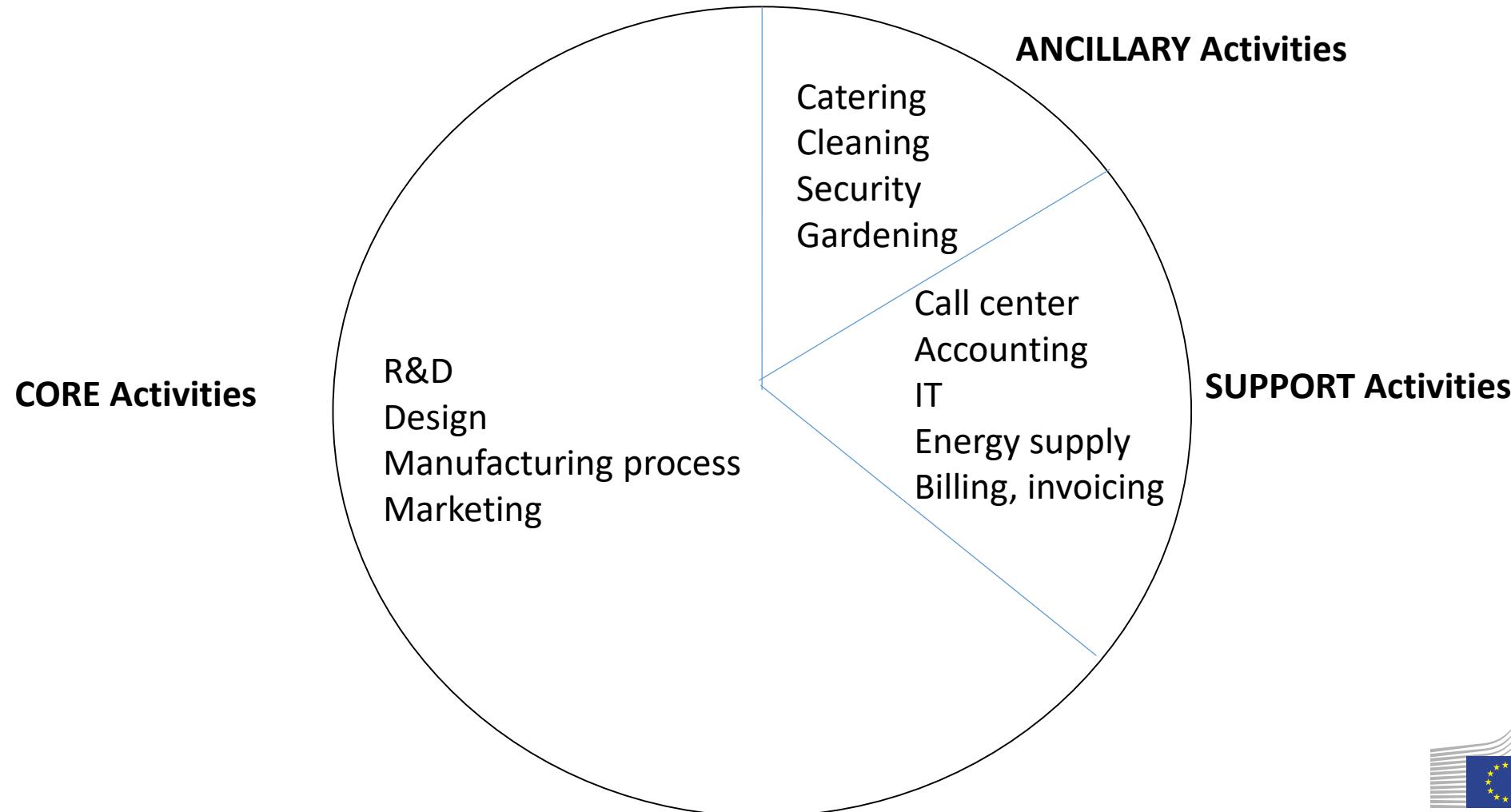
Wednesday 19 February 2020

Wolfgang Mostert, TAF

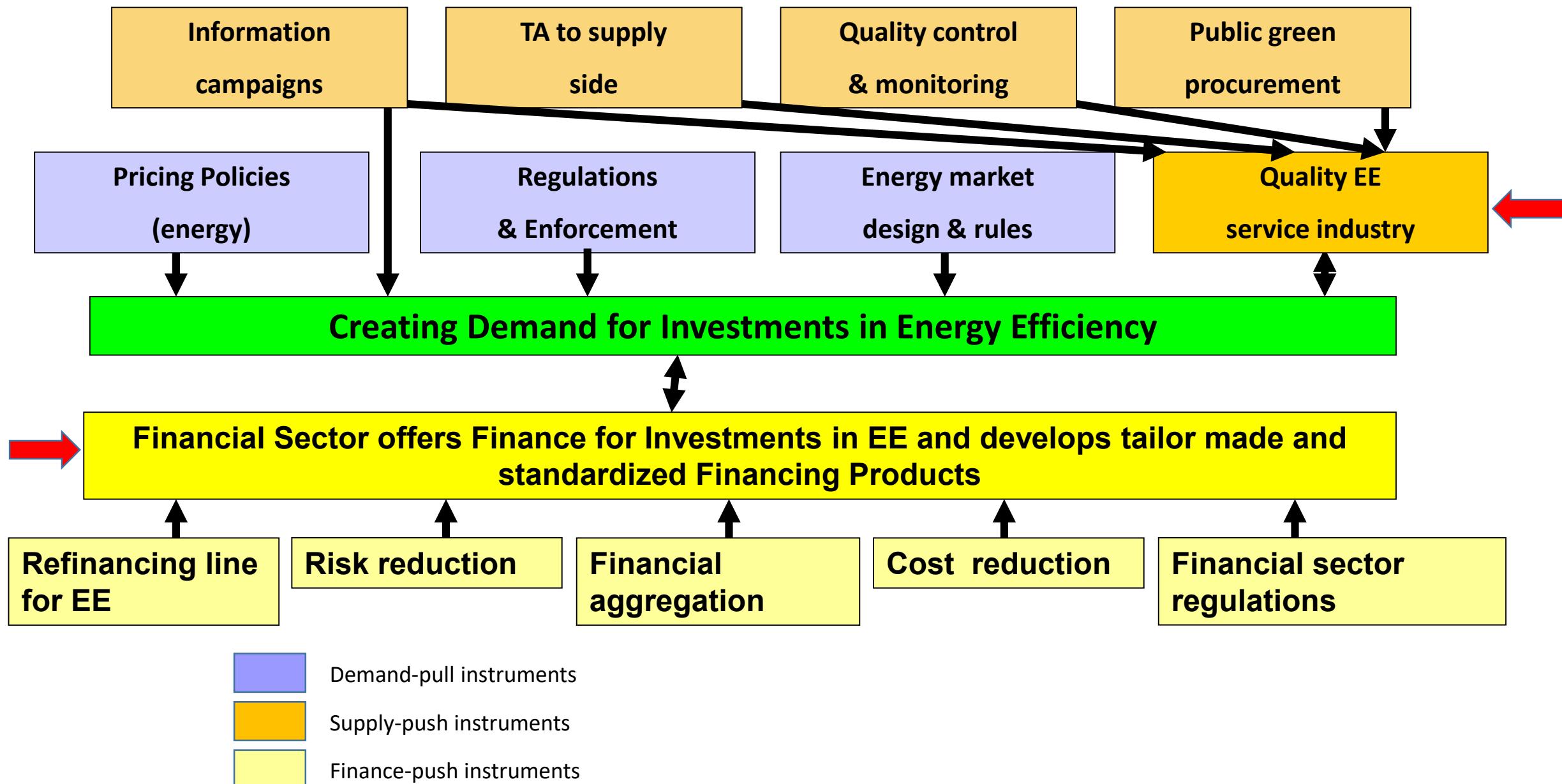
Obstacles to Energy Savings

1. The cost of energy consumption is only 0.5-3 percent of total costs in a typical industry. Which is why they do not command management attention
2. Most commercial firms do not employ energy specialists.
3. Lack of finance as energy saving investments compete with other investment priorities (investments in “core competence” will win over “ancillary service” and “support service” activities)
4. Core public sector entities usually have very small investment budgets and little discretion on how to use it

Outsourcing of non-core activities in industrial companies



Creation of Market Capacity to sustain EE investments: Policy Intervention Areas and Instruments



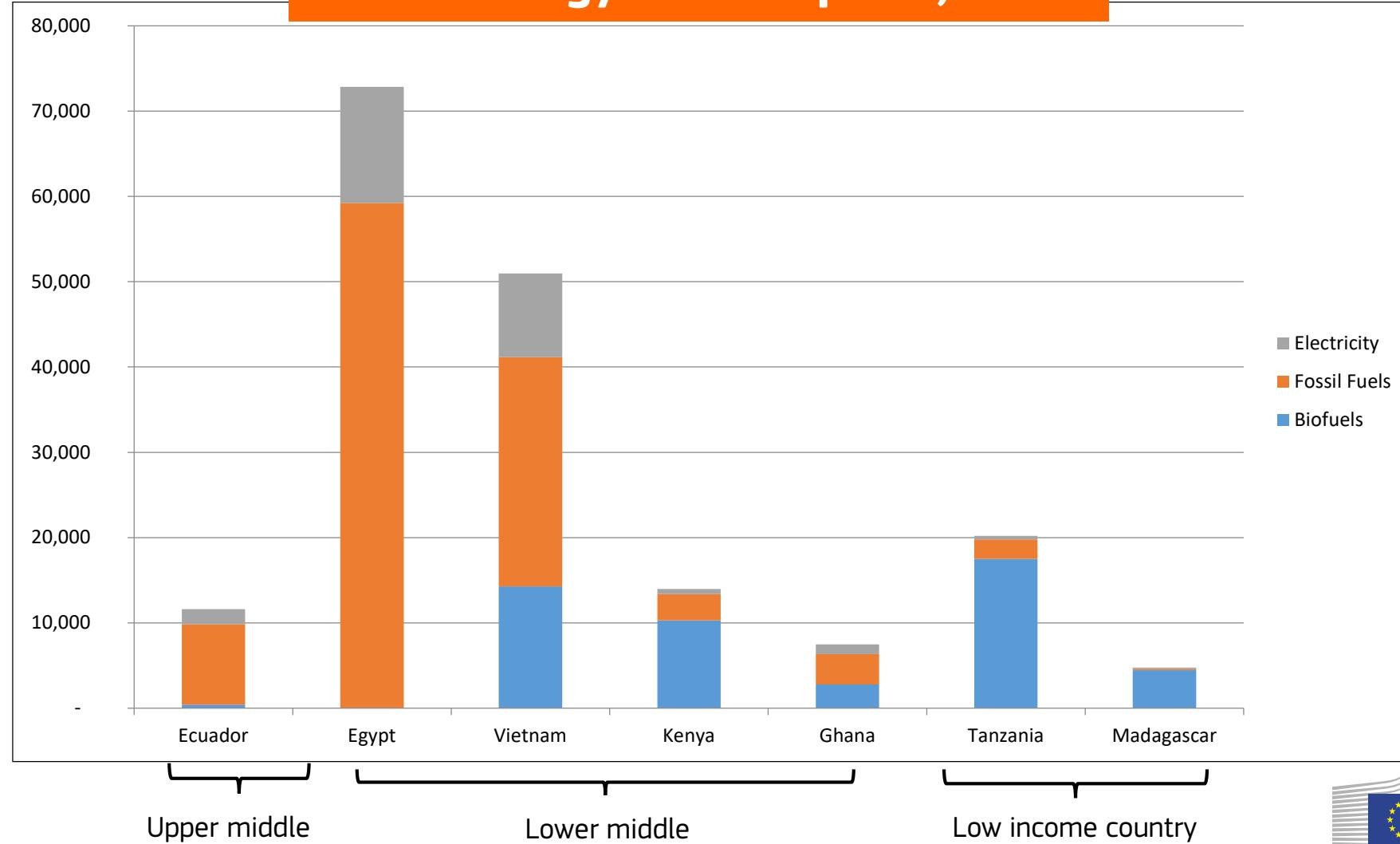
World Bank classification of countries (GNI per capita 2018, Atlas method)

- High income \$12,376 or more.
- Upper-middle: \$3,996 - \$12,375,
- Lower-middle: \$1,026 - \$3,995
- Low income: \$1,025 or less

RISE Indicators

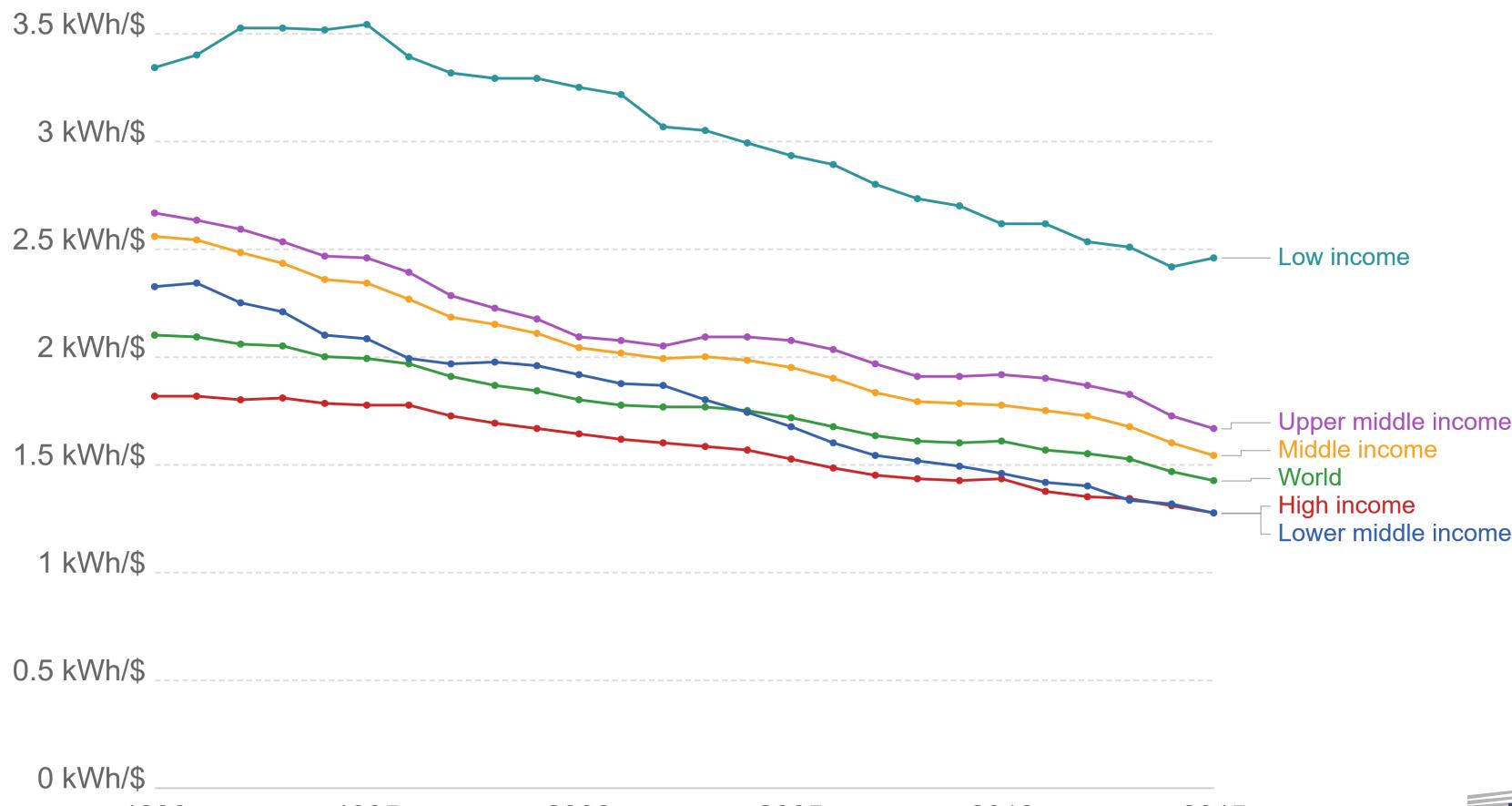
Income	Energy				Urbanisation
	Access	EE	RE		
Low Income	34	20	30		34%
Lower middle	68	34	46		47%
Upper middle	97	48	54		71%

Final Energy Consumption, ktoe



Energy intensity of economies

Energy intensity level of primary energy is the ratio between energy supply and gross domestic product measured at purchasing power parity. Energy intensity is an indication of how much energy is used to produce one unit of economic output. Lower ratio indicates that less energy is used to produce one unit of output.





Improvement rate in world EE productivity is in line with overall improvement in world economic productivity

Annual growth rate world GDP per capita: 1990 to 2018 = 1.5%

Average annual rate of improvement in global primary energy intensity

- 1990 to 2010: 1.3%
- 2010 to 2016: 2.3%

SDG target 7.3 (energy efficiency) of 2.6% per year must be raised to over 2.7%



Thank you!