



# **DEVCO** **Environment and Climate Week 2020**

**17-21 February 2020**  
**Brussels, Belgium**

# **Sustainable Energy: Introduction to Energy Efficiency**

**Wednesday 19 February 2020**

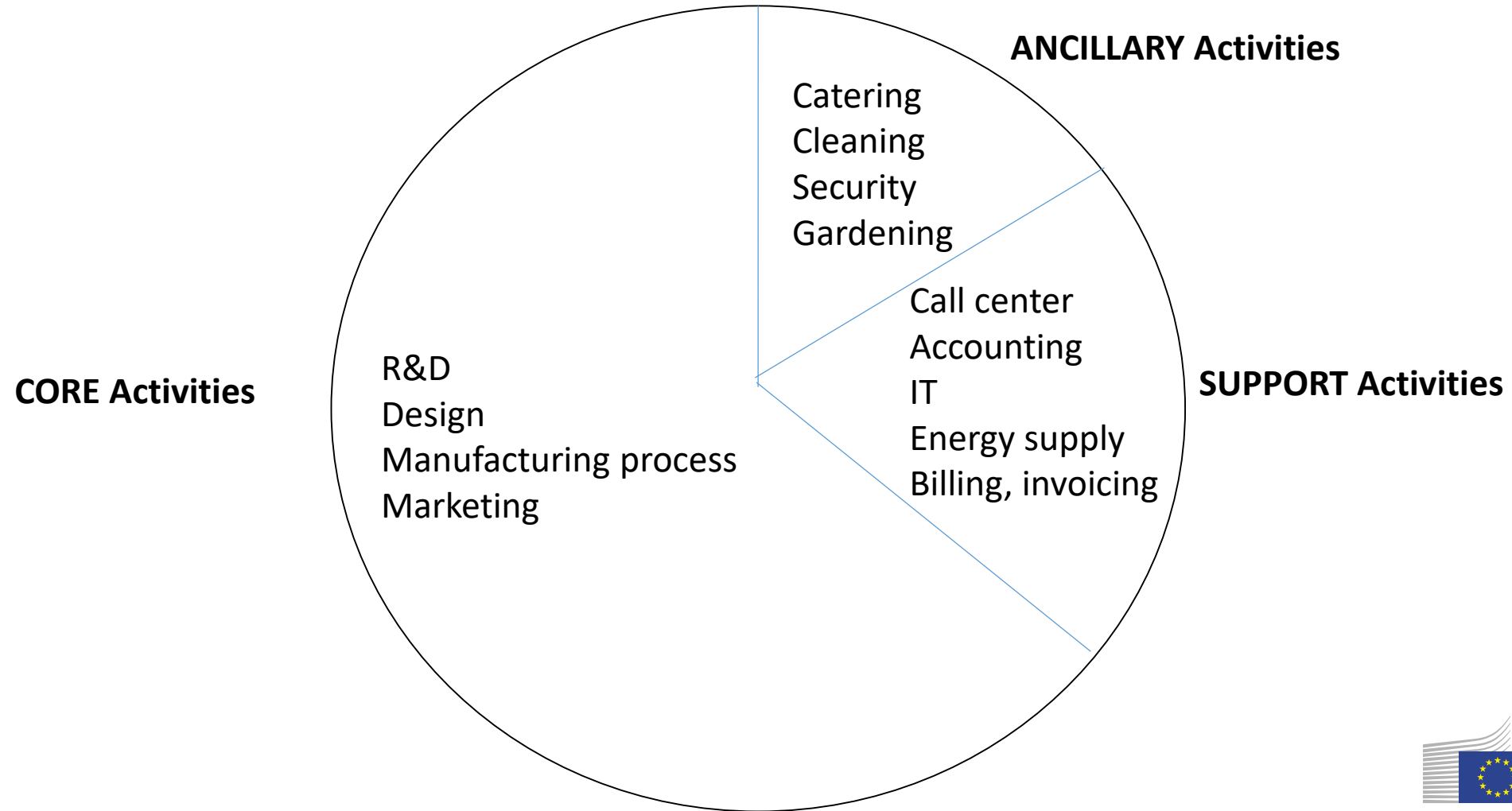
**Wolfgang Mostert, TAF**



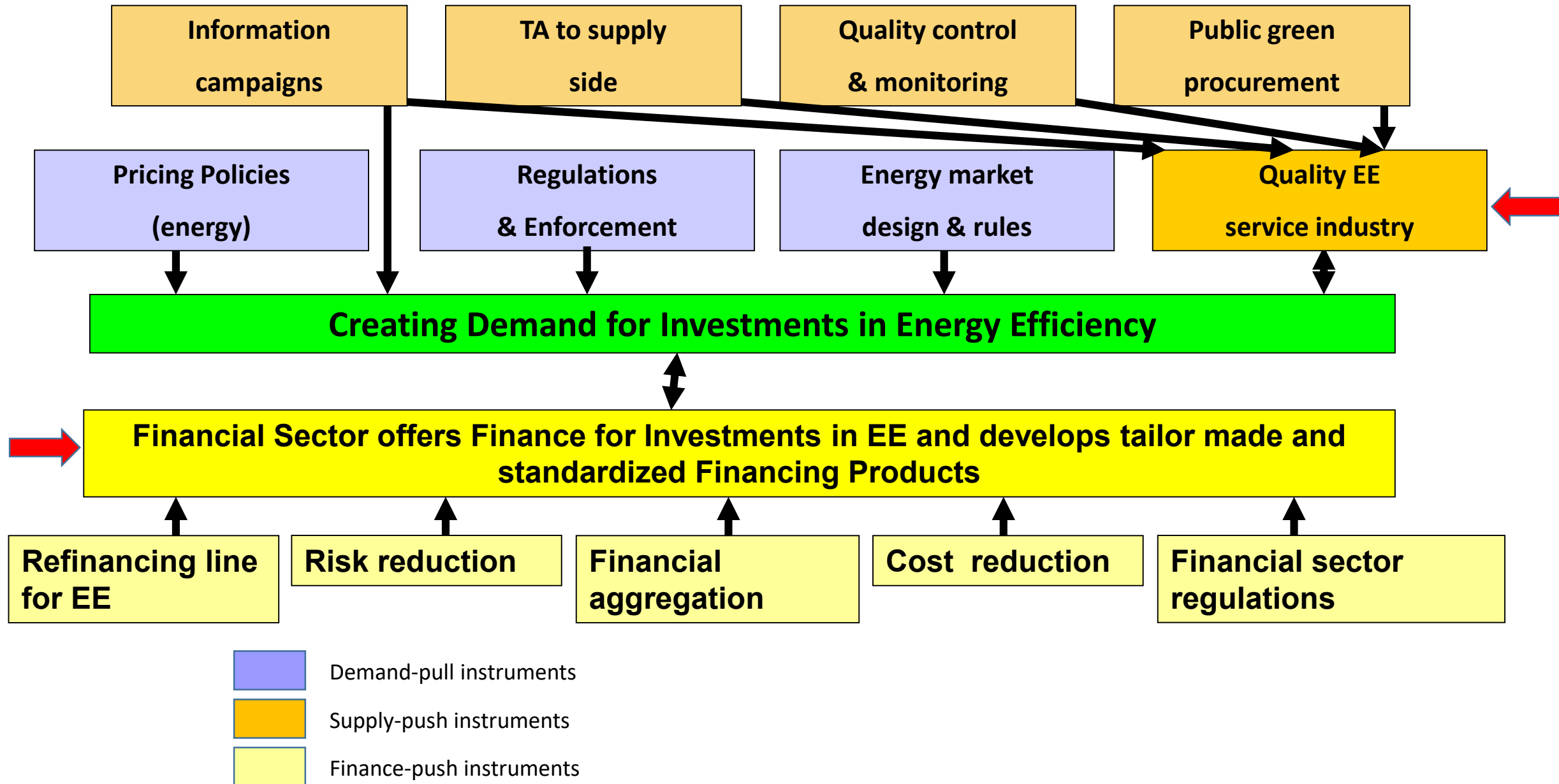
## Obstacles to Energy Savings

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



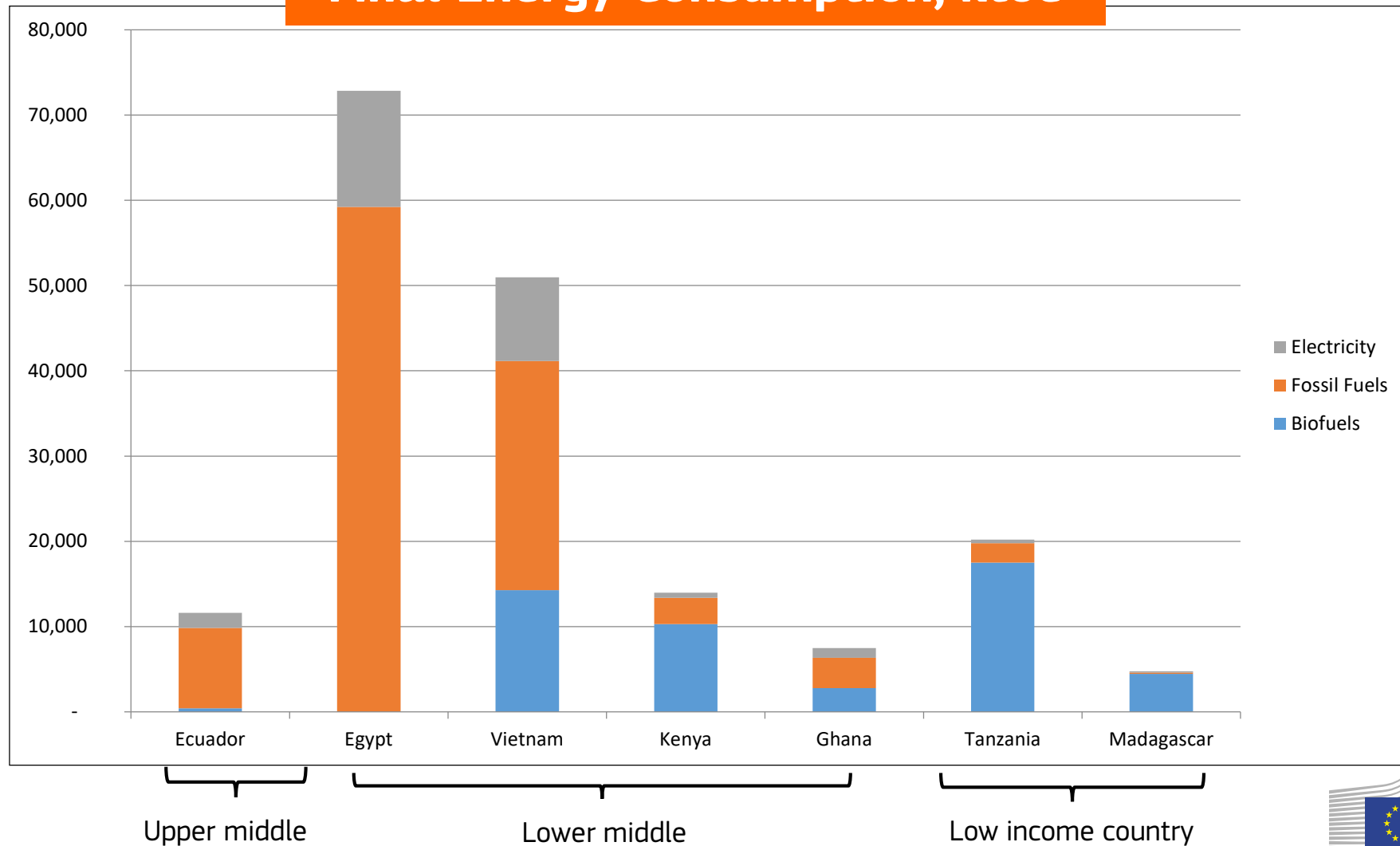
## World Bank classification of countries (GNI per capita 2018, [Atlas method](#))

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

	<b>RISE Indicators</b>			
<b>Income</b>	<b>Energy Access</b>	<b>EE</b>	<b>RE</b>	<b>Urbanisation</b>
Low Income	34	20	30	34%
Lower middle	68	34	46	47%
Upper middle	97	48	54	71%



## Final Energy Consumption, ktoe

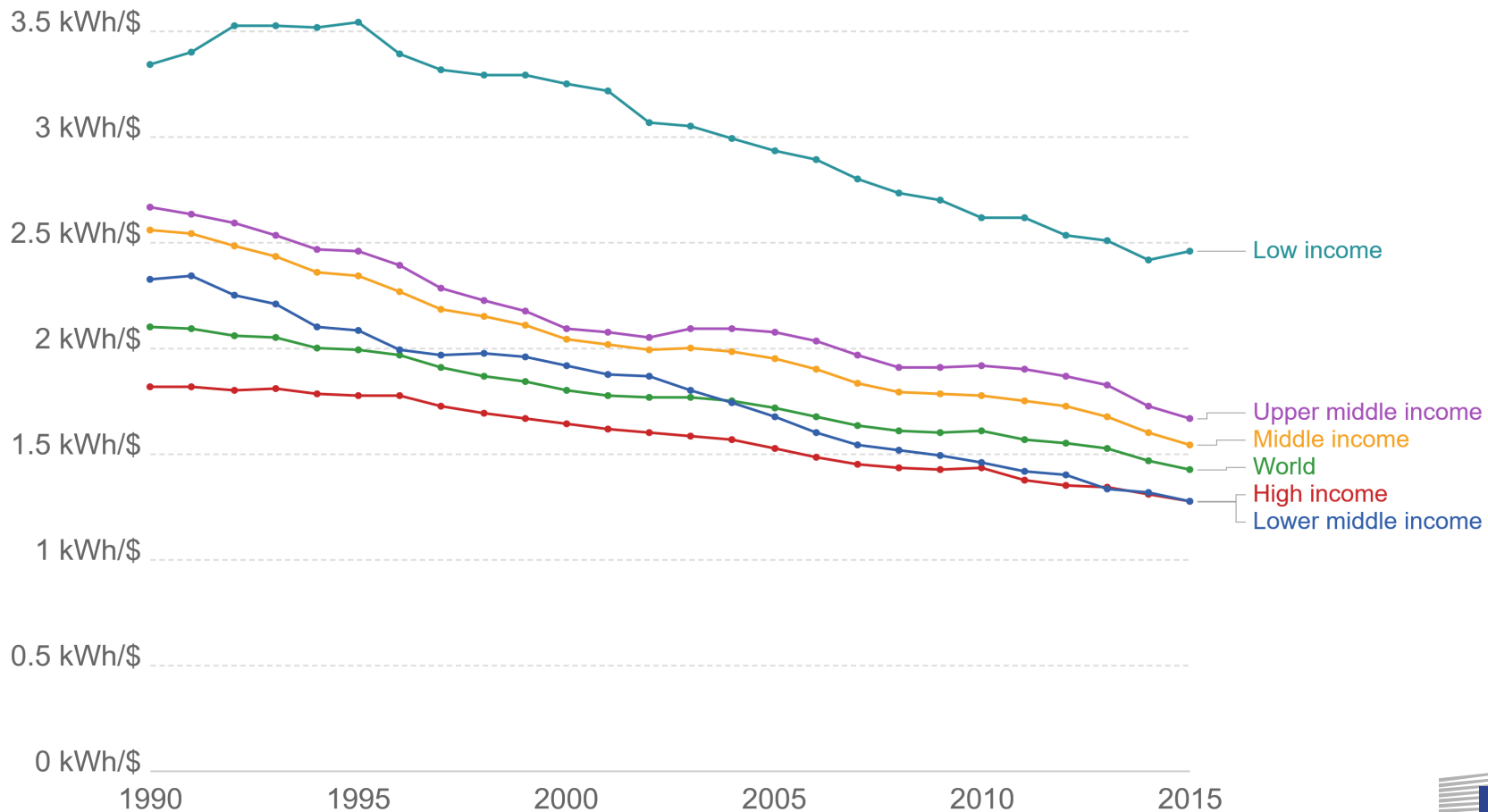




## Energy intensity of economies

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.

Our World  
in Data



Source: World Bank, Sustainable Energy for All (SE4ALL)

OurWorldInData.org/energy-production-and-changing-energy-sources/ • CC BY



# 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!