

SDG7 and the Energy Transition in the Asia-Pacific

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ESCAP Overview



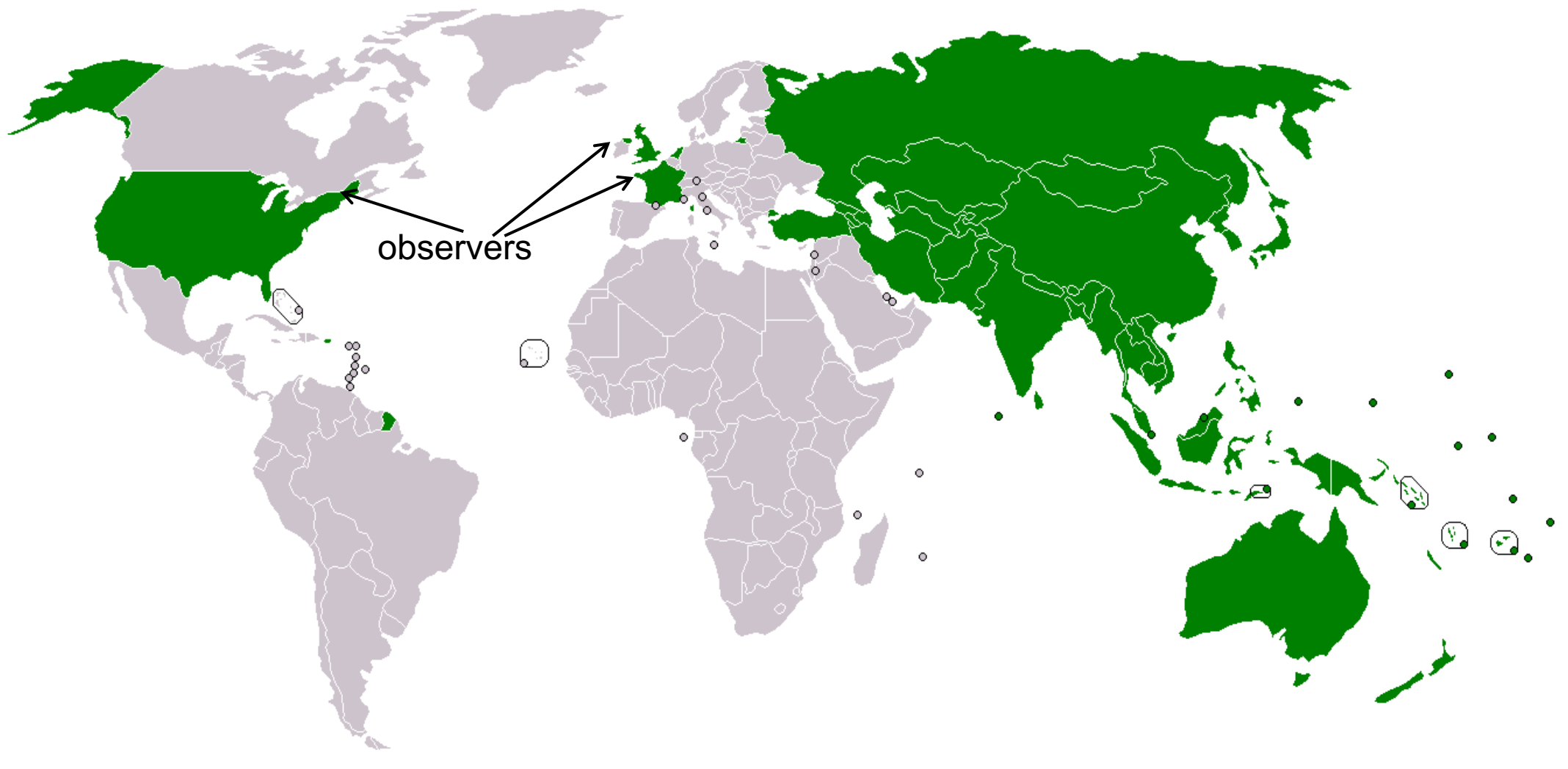
- Regional development arm of the United Nations for the Asia-Pacific, established in 1947
- 62 member States, 4.5 billion people - two thirds of the world's population
- Headquarters in Bangkok: 4 sub-regional offices and 5 regional institutes across the Asia-Pacific

Focus Areas

1. Disaster Risk Reduction
2. Environment and Development
3. Information and Communications Technology
4. Macroeconomic Policy Development
5. Social Development
6. Statistics
7. Trade, Innovation and Investment
8. Transport
9. **Energy**

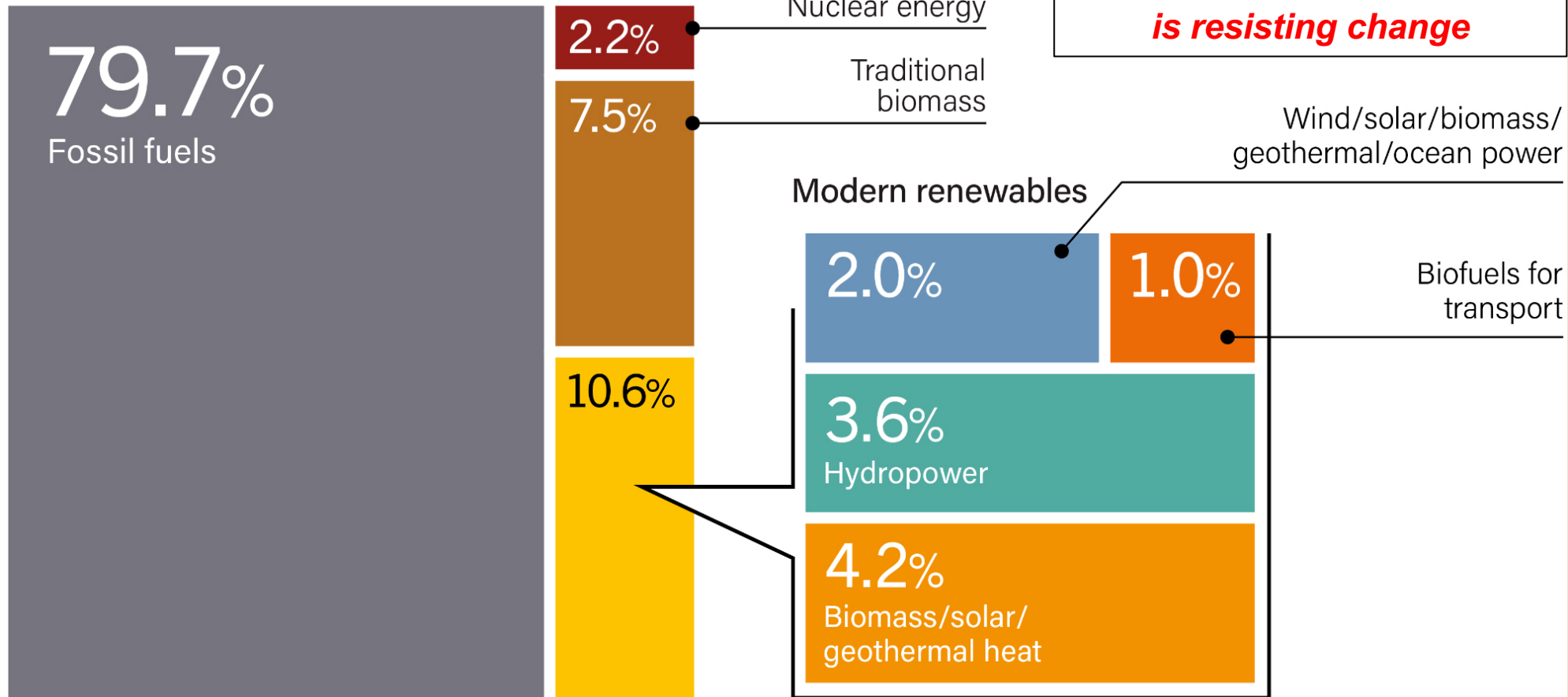


ESCAP Member Countries



A Reality Check – fossil fuels still dominate

Estimated Renewable Share of Total Final Energy Consumption, 2017



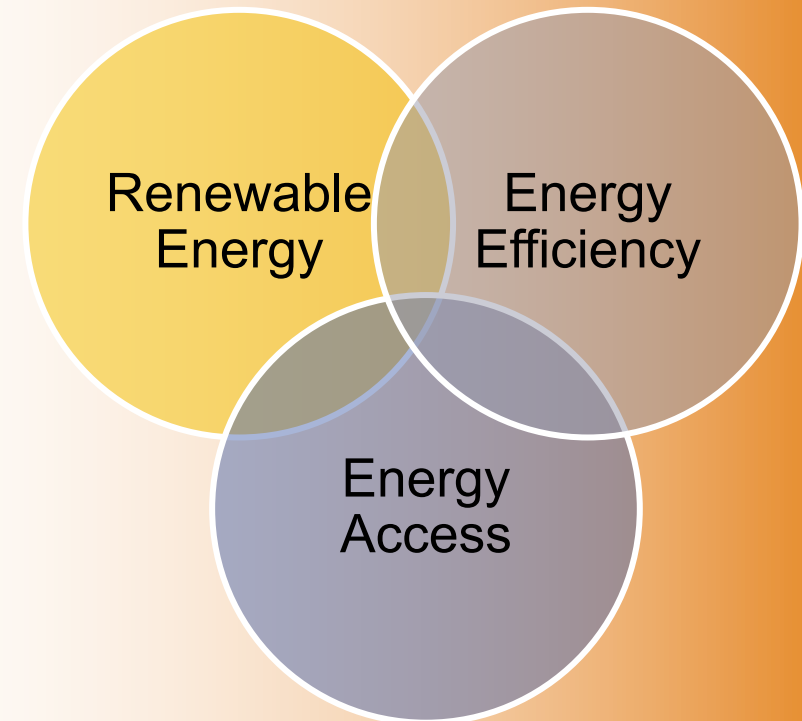
Note: Data should not be compared with previous years because of revisions due to improved or adjusted data or methodology. Totals may not add up due to rounding.

Source: OECD/IEA and IEA SHC.

Image courtesy
REN21

SDG7 – a first step in the transition to sustainable energy

- Target 7.1. “By 2030, ensure universal access to affordable, reliable and modern energy services.”
Two components:
 - access to electricity;
 - access to clean cooking fuels.
- Target 7.2. “By 2030, increase substantially the share of renewable energy in the global energy mix”.
- Target 7.3. “By 2030, double the global rate of improvement in energy efficiency”, measured by energy intensity - ratio of total primary energy supply to GDP.
- All three targets are mutually reinforcing.



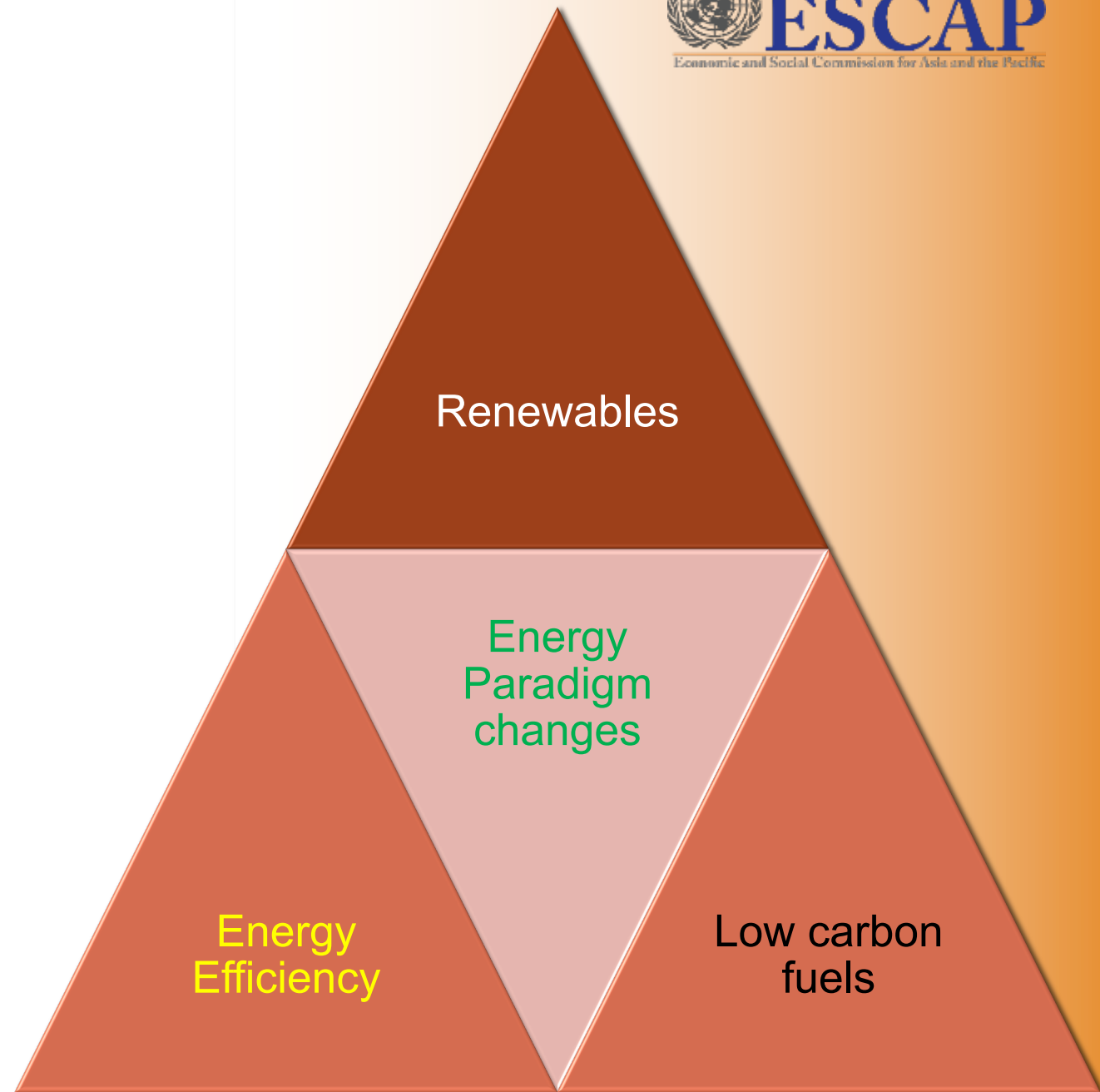
Why do we need an energy transition?

- Climate change – CO₂ levels highest in 800,000 years
- Approaching or exceeding several “planetary boundaries”
- Increasing population and energy demand
- Enduring energy poverty in many regions
- Chronic urban air pollution



Image courtesy NASA

Possible building blocks of an energy transition

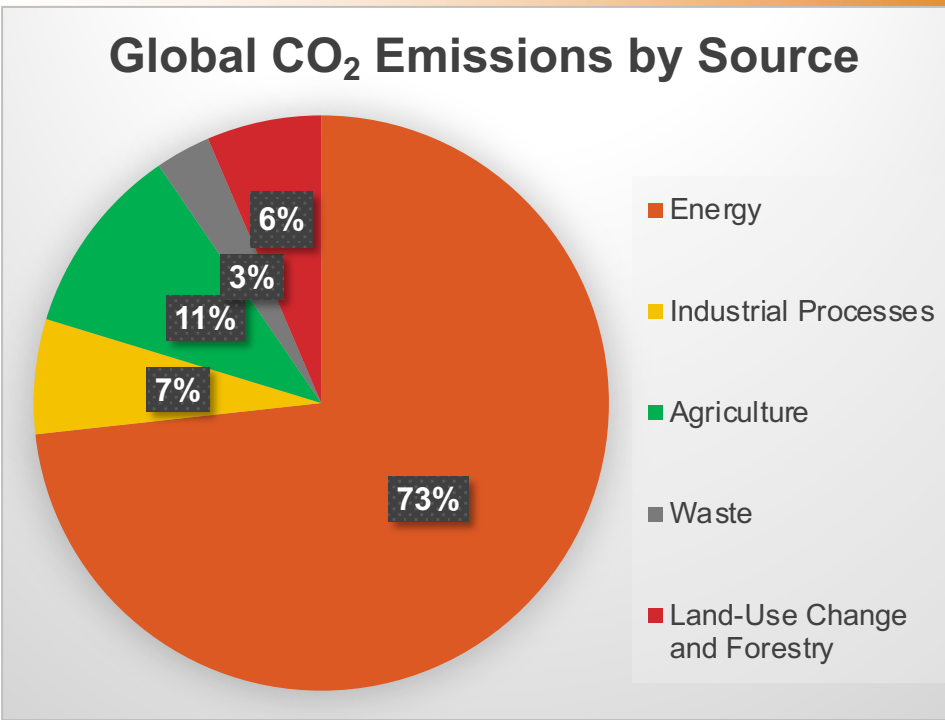
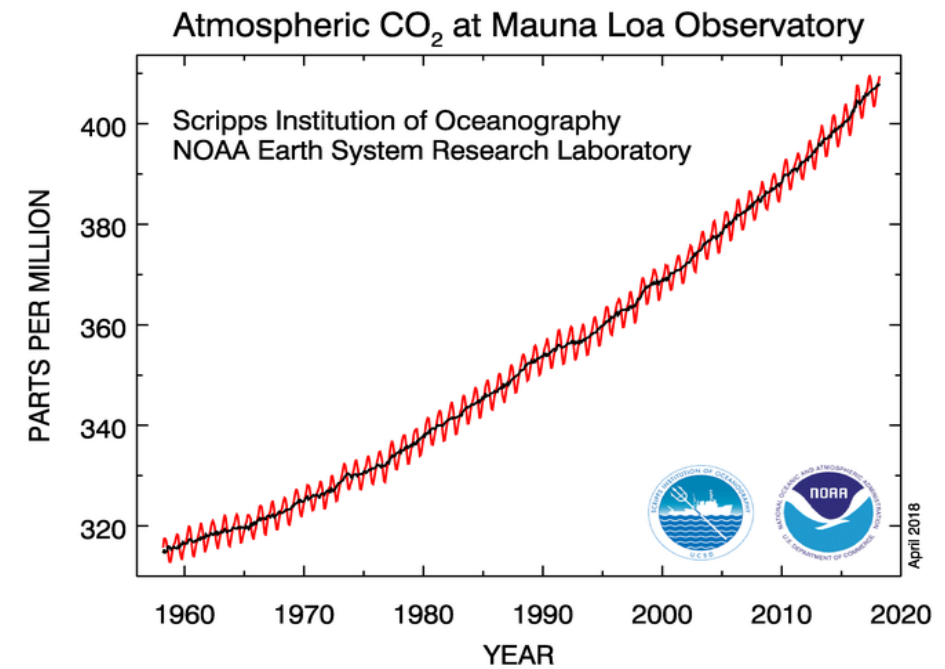


Driver and enablers for SDG7 and the energy transition

DRIVERS	ENABLERS
Climate change	Falling cost of renewables and energy efficiency
Chronic urban air pollution	Global/regional cooperation on sustainable and low carbon development
Tipping points of “planetary boundaries”	Other mutually reinforcing SDGs, better policy coherence
Energy poverty	Electric mobility, 4 th industrial revolution technologies, the sharing economy
Increasing energy demand, energy security	New sources of finance – green bonds, climate finance, impact investing
Public and investor sentiment moving against fossil fuels	Cross-border electricity trade

Long Term Driver - Climate Change

- Global atmospheric CO₂ has exceeded 412 ppm – pre-industrial level was 280 ppm.
- Paris Agreement aims for warming limit of least 2 degrees, preferably 1.5 degrees.
- More ambition needed - current pledges to Paris Agreement are only two-thirds of what is needed put us on track to 2 degrees.
- Energy represents 73% of anthropogenic remissions. Renewable energy and energy efficiency major part of mitigation effort.



Near Term Driver – Air Pollution



Image courtesy Hindustan Times

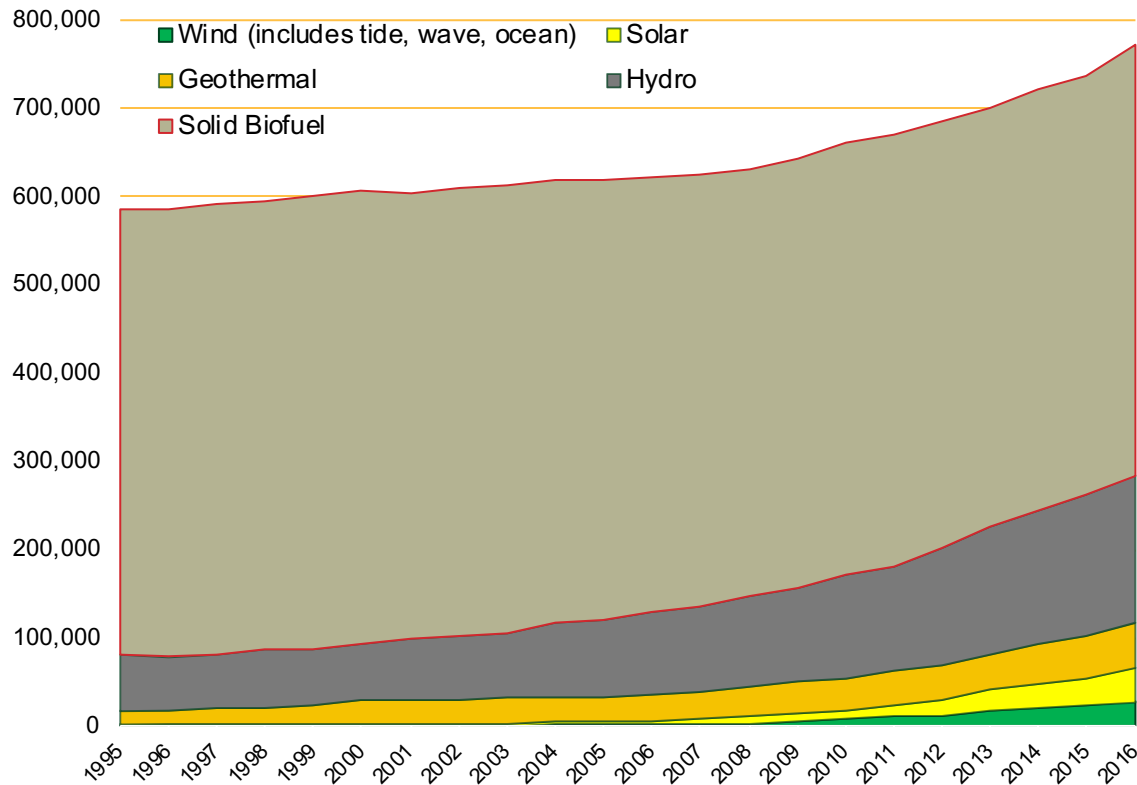
- **Today:** 5.5 million premature deaths annually
- **By 2060:** 3.75 billion working days lost and \$142 billion in healthcare costs per annum. Up to 1% of GDP lost.

(OECD)

Asia-Pacific Renewable Energy Progress

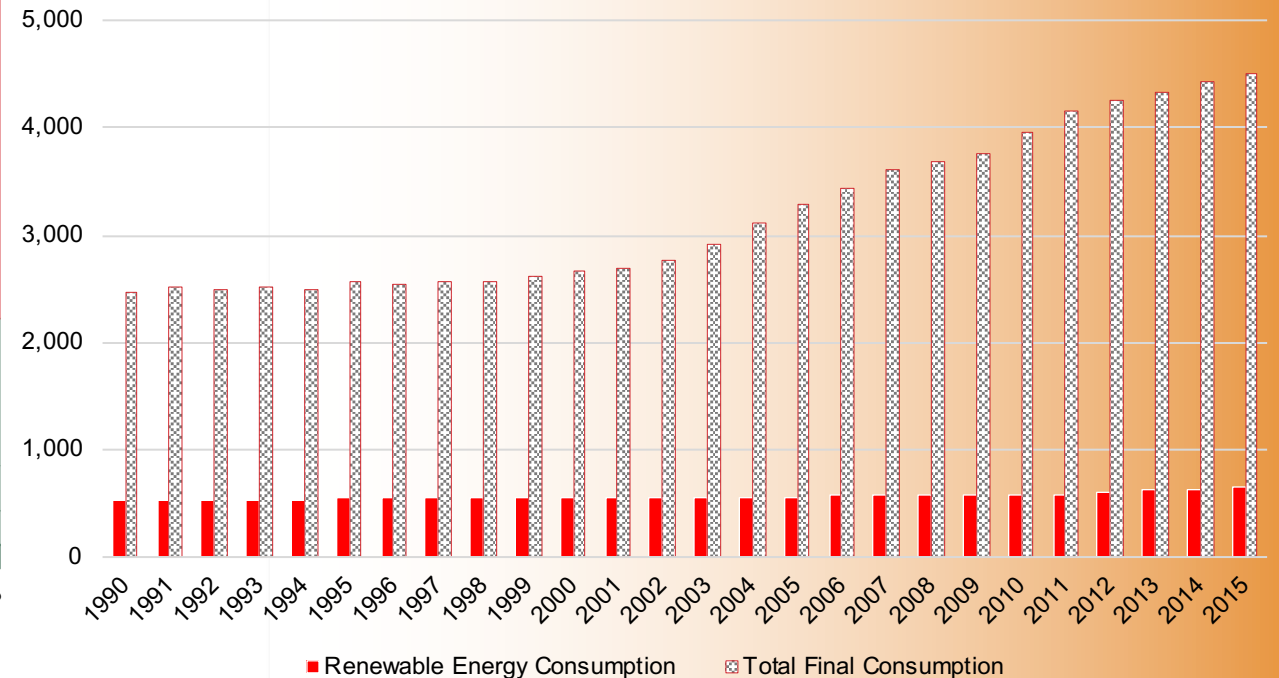
Renewable energy production is rising and diversifying, but progress is hampered by demand growth

Modern Renewable Energy Production by Resource



- The share of renewable energy has not increased significantly from 2014-16
- Renewables reached a share of **17.3%** in **2016**

Renewable Energy Share is Flat from 2014-16



Modalities for SDG7 Regional Cooperation in Asia-Pacific

- Regional dialogues - countries share and learn from successful SDG7 experiences
- Regional energy cooperation: technical assistance, joint project development, cross-border power trade, sharing of best practices
- ESCAP's Committee on Energy, Asian and Pacific Energy Forum and expert working groups on connectivity and SDG7
- Regional approaches to electricity supply via power grid interconnection, supported by ESCAP technical and normative work



Thank You

Questions?

