

Energy Efficiency Financing Mechanisms in Asia and the Pacific

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ESCAP Energy Division

Mission Statement:

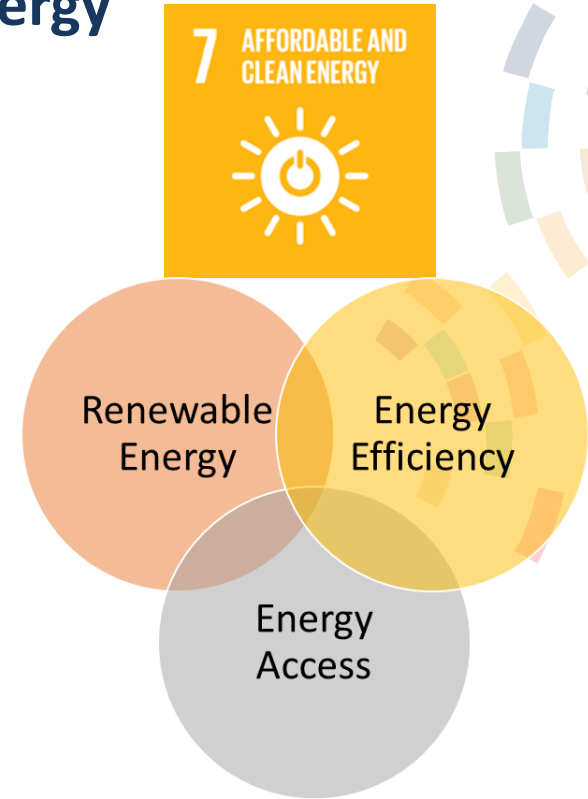
“To ensure access to affordable, reliable, sustainable, and modern energy for all in Asia and the Pacific; and to enhance energy security and connectivity by promoting regional cooperation, using the means of intergovernmental process, research, and capacity building”.

Within this scope, we support our member states in:

- Providing a platform for intergovernmental dialogue and knowledge exchange.
- Energy research, data and knowledge sharing to support evidence-based policy, including through the Asia Pacific Energy Portal
- Capacity Building

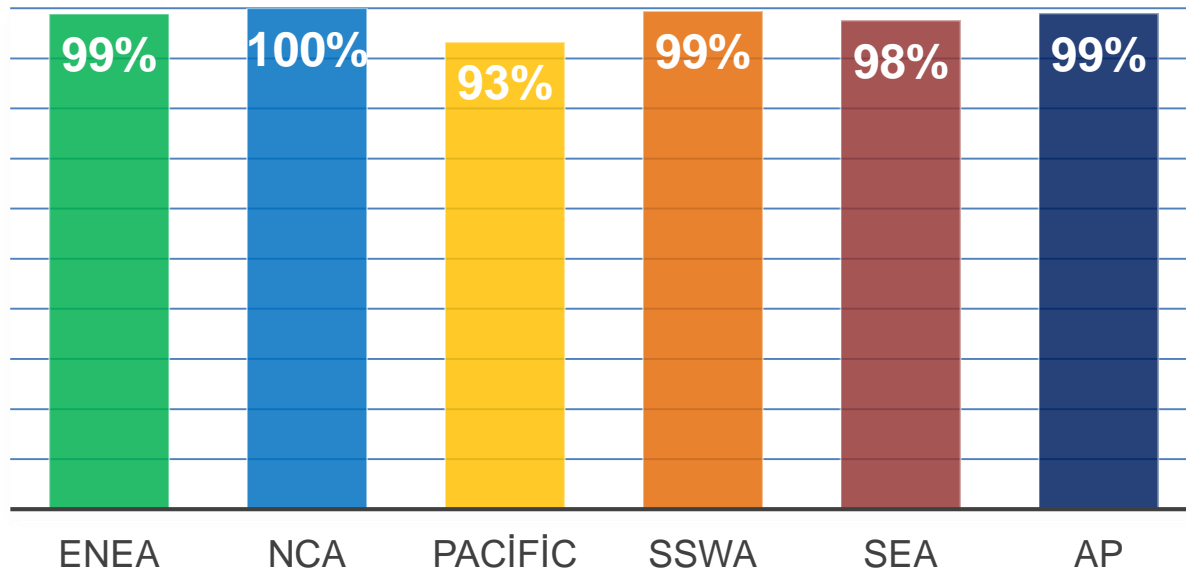
Elements of Sustainable Development Goal 7 – a transition to sustainable energy

- **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 and technologies.
- **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.



Asia Pacific SDG Outlook – Electricity Access

Goal 7.1.1 : 100% Electrification by 2030

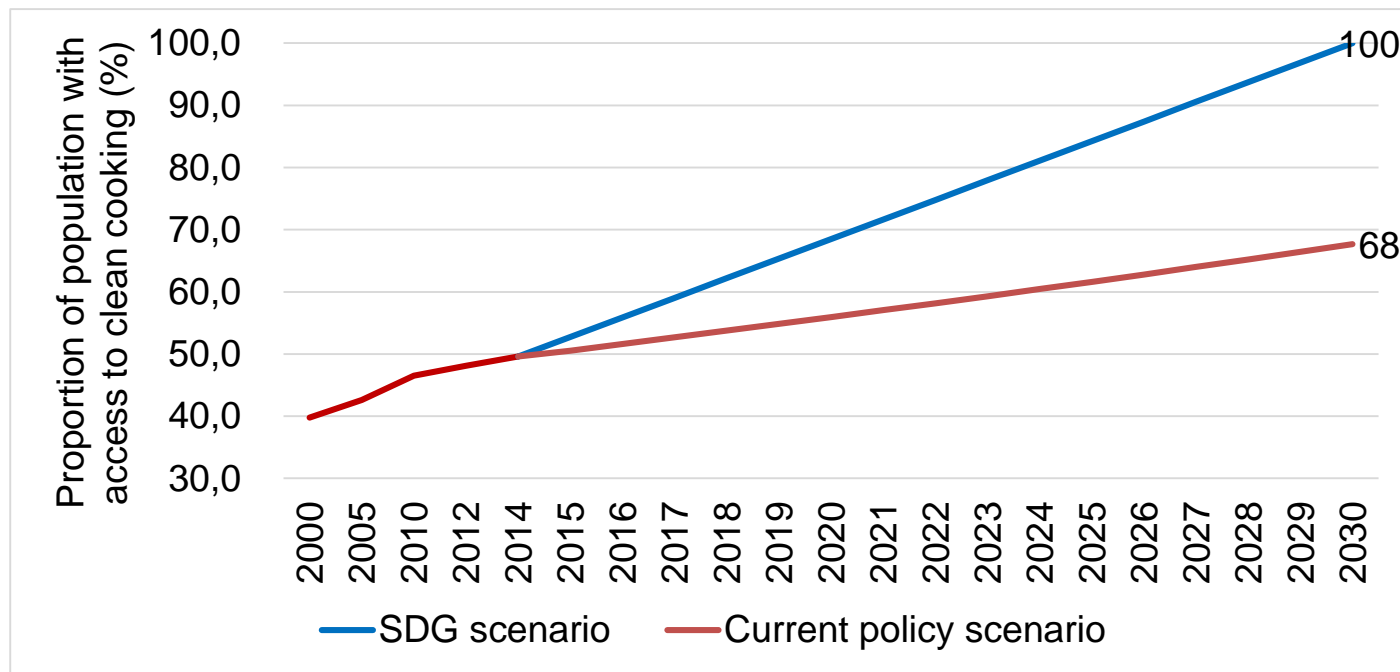


Source: ESCAP analysis

Gap: 1.3% (63 million people) will remain without electricity access in 2030 based on current policies

Asia Pacific SDG Outlook – Clean Cooking

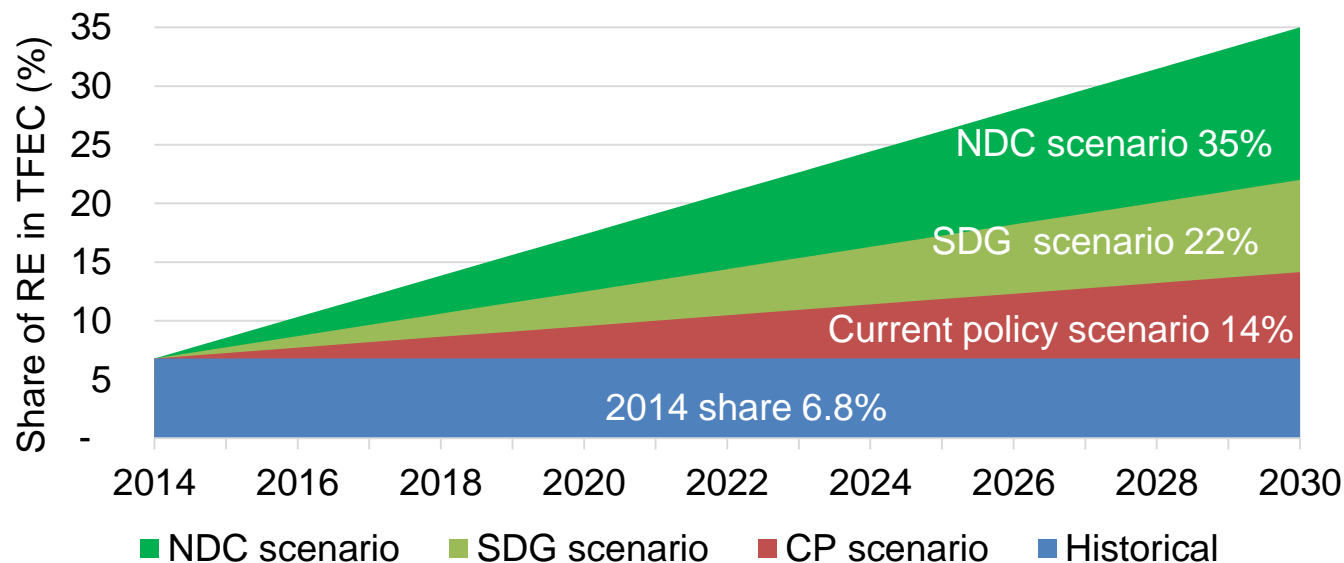
Goal 7.1.2 : 100% access to clean cooking fuels and technologies by 2030



Gap: 32% (1.6 billion people) will remain without access to clean cooking in 2030 based on current policies

Asia Pacific SDG Outlook – Renewable Energy

Goal 7.2 : Increase share of renewable energy to 22%

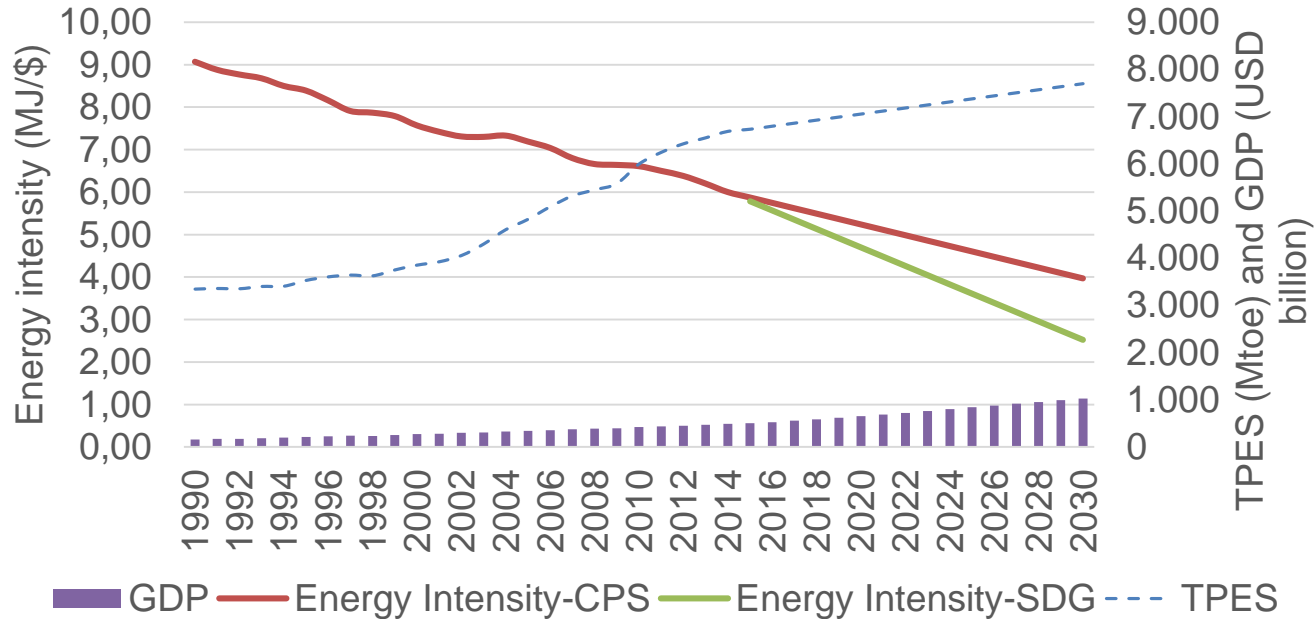


Source: ESCAP analysis

Gap: RE is projected to reach only 14% by 2030 leaving a gap of 8 percentage points.

Asia Pacific SDG Outlook – Energy Efficiency

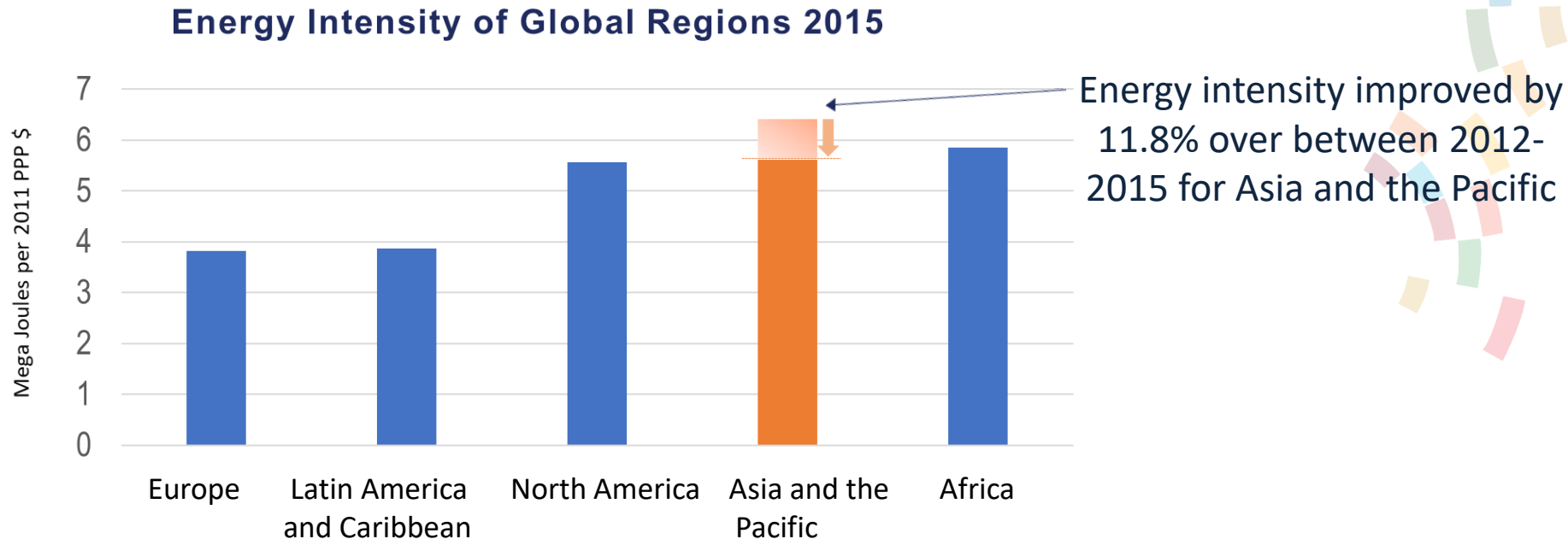
Goal 7.3 : Reduce energy intensity to 2.5MJ/\$



Source: ESCAP analysis

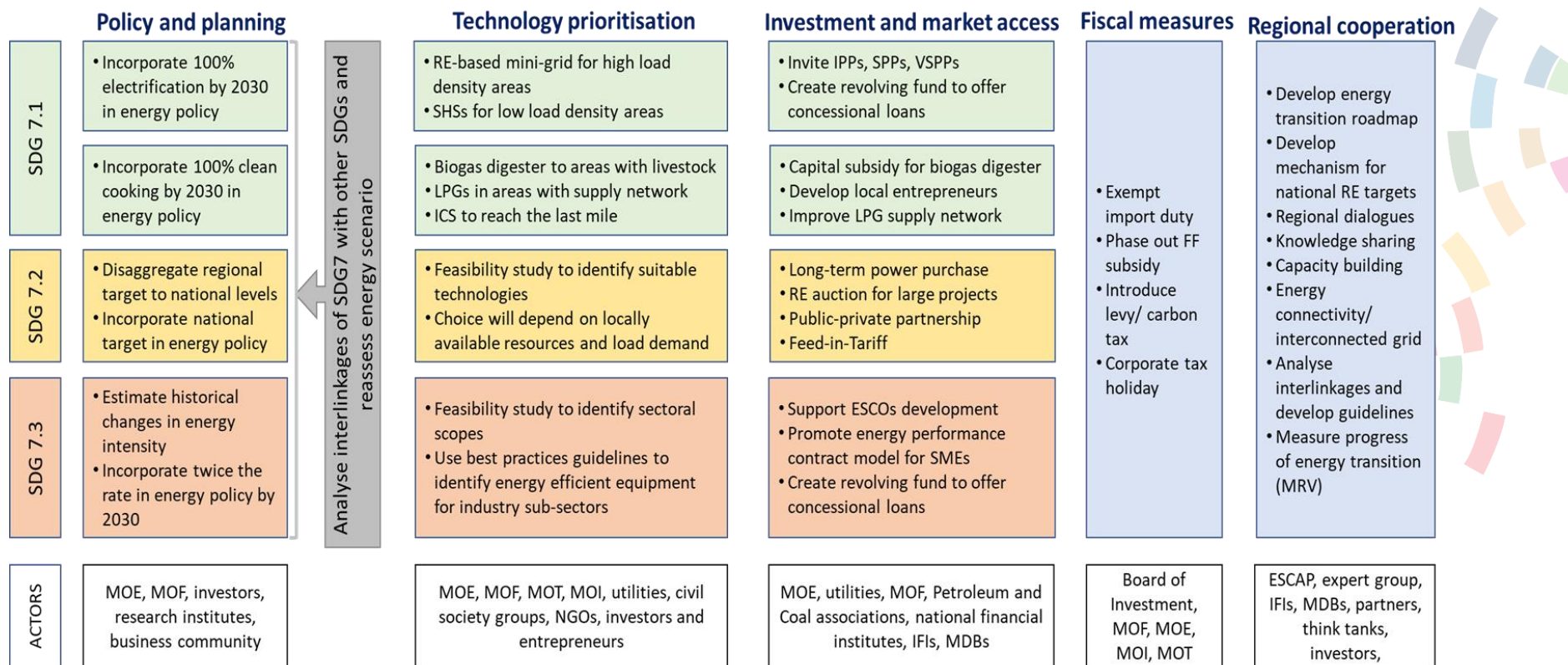
Gap: 1.5MJ/\$ based on current policies

2012-2015 Results: Energy efficiency

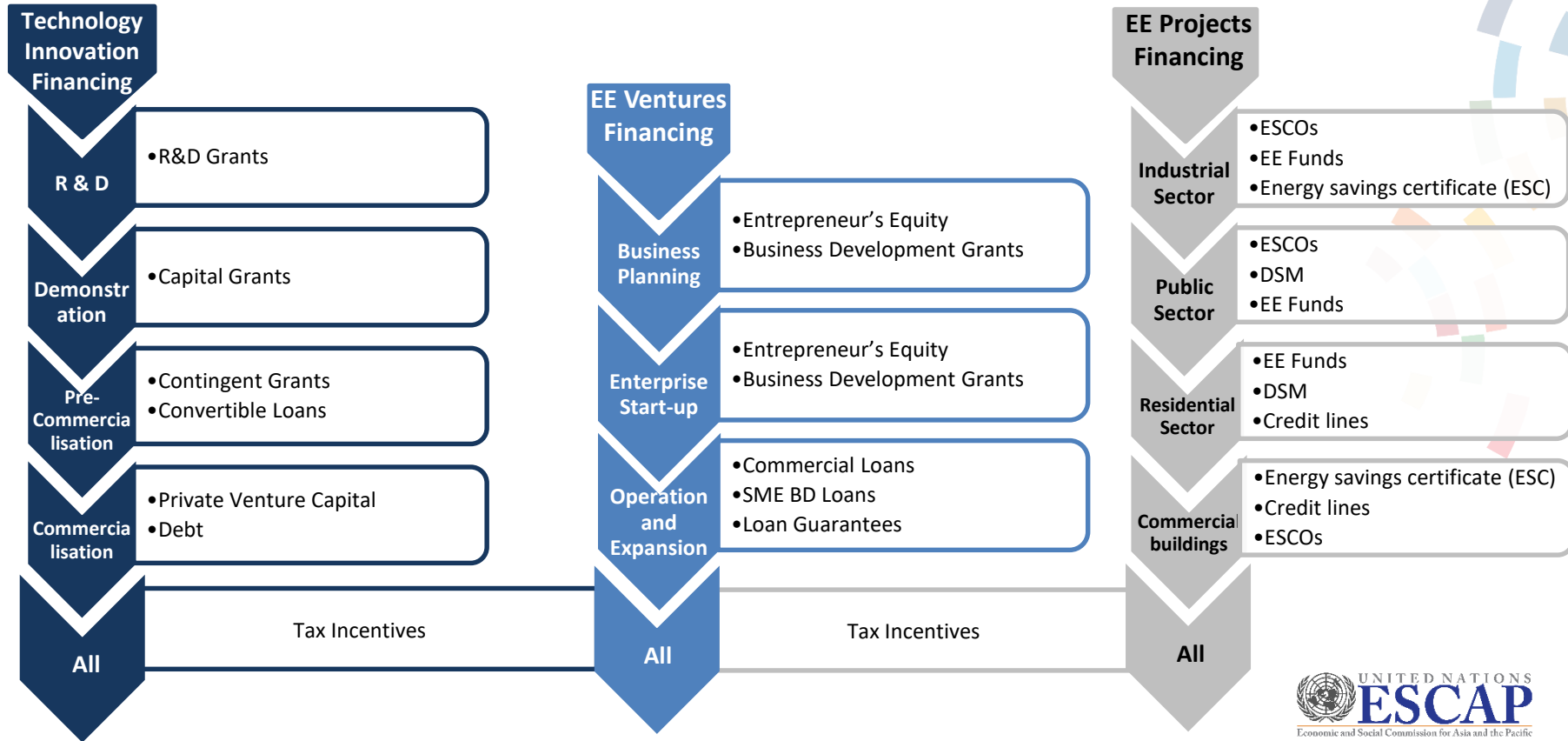


Energy intensity has fallen but Asia and the Pacific remains among **the highest** global regions

Policy options to enable the energy transition



Energy Efficiency Financing Mechanisms



Lessons from Behavioral Economics

“The purely economic [person] is indeed close to being a social moron. Economic theory has been much preoccupied with this rational fool.”

-- Richard H. Thaler, Misbehaving: The Making of Behavioral Economics

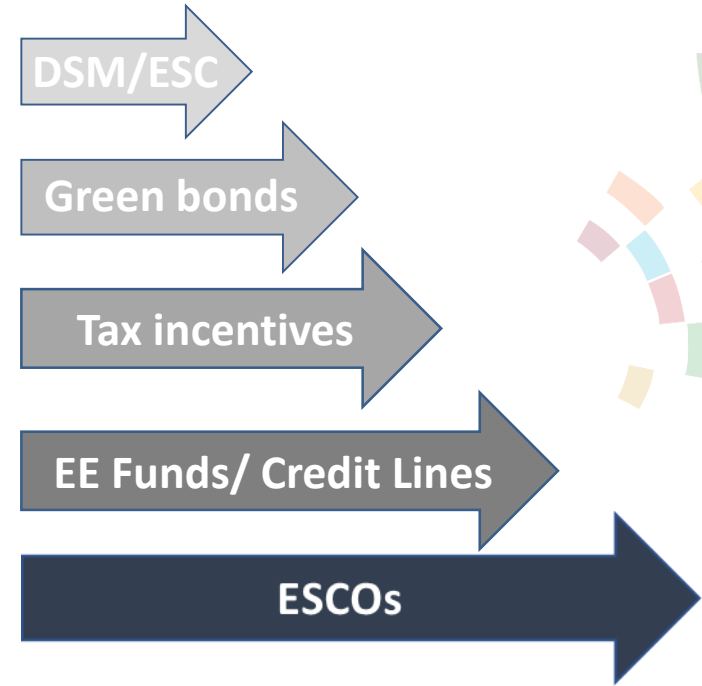
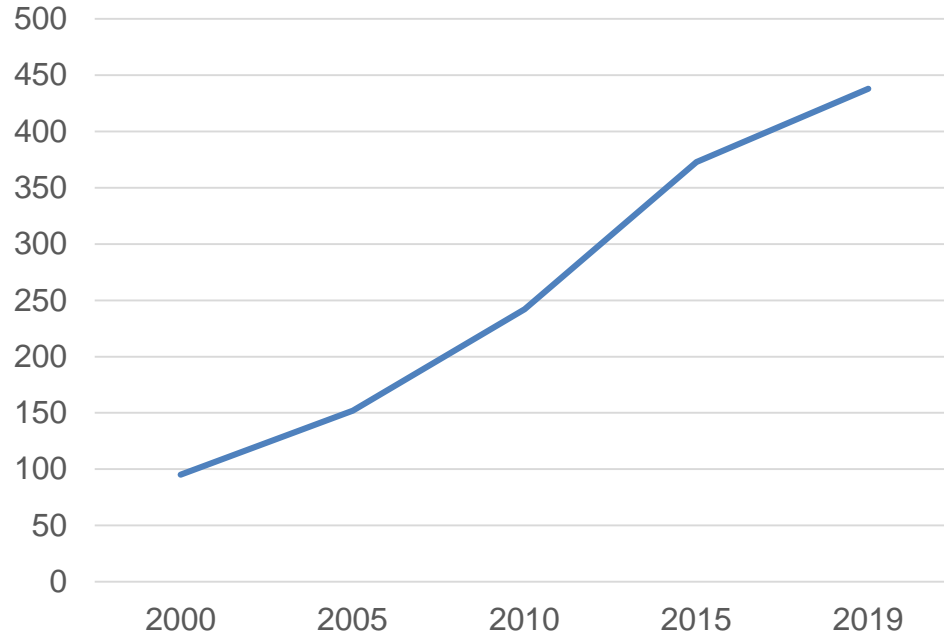
Examples in implementation:

- Simplifying loan repayment: On-bill repayment
- Longer payback periods for small-scale property owners (Property Assessed Clean Energy programmes)
- Aligning split incentives, eg. Renter vs. building owner
- Positive Reinforcement, eg. Opower

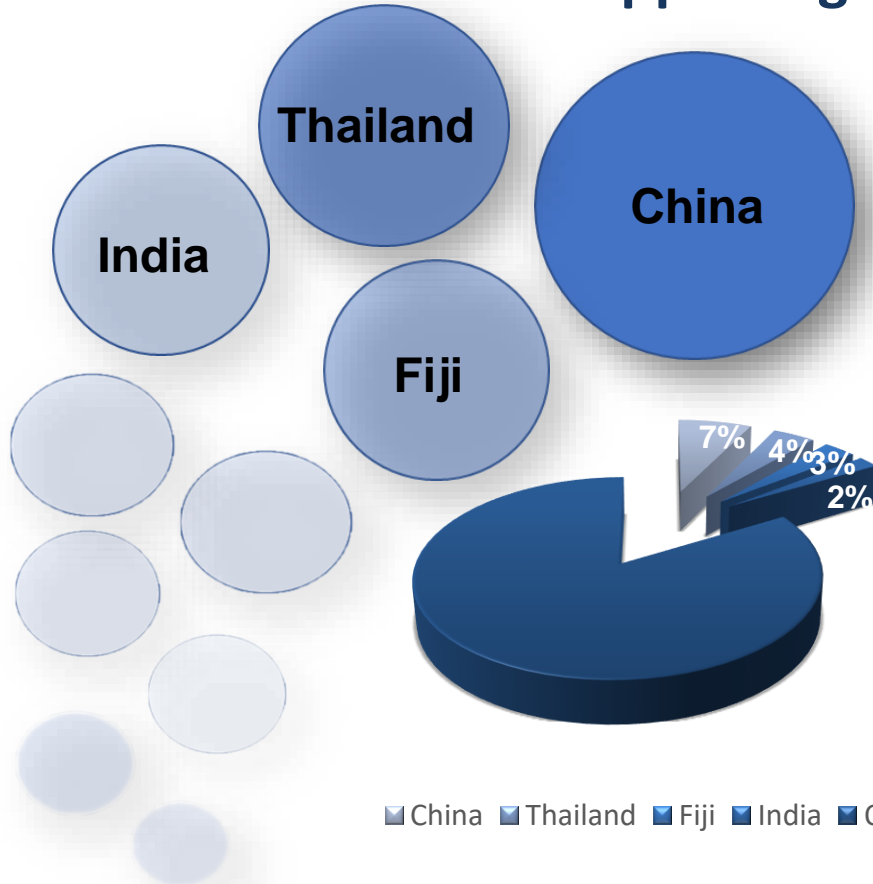


Policies in support of Energy Efficiency Financing Mechanisms in Asia and the Pacific

EE Financial Incentives



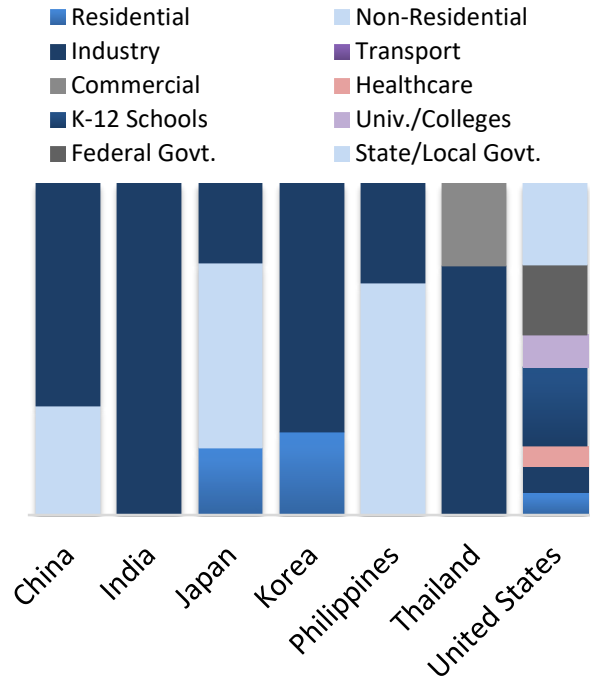
Top 4 countries with the greatest number of Policies supporting EE Financial Mechanisms



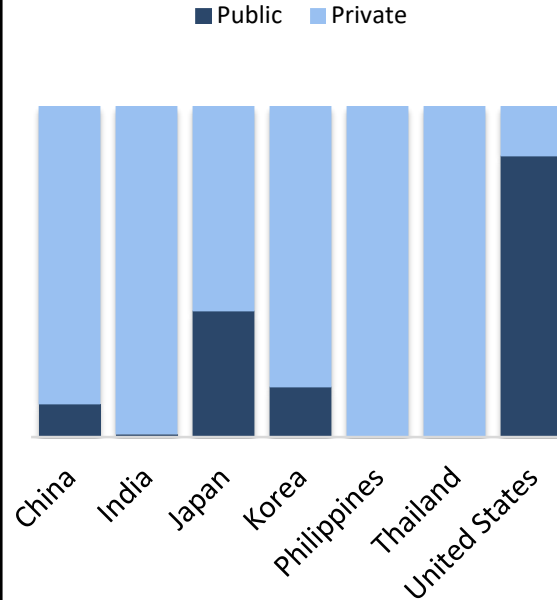
	China	Thailand	Fiji	India
No of policies	30	16	15	12
ESCOs	✓	✓	✓	✓
DSM/ESC	✓	✓		✓
Tax incentives	✓	✓	✓	
Green bonds	✓	✓	✓	✓
EE funds/Credit lines	✓		✓	✓

Energy Service Companies

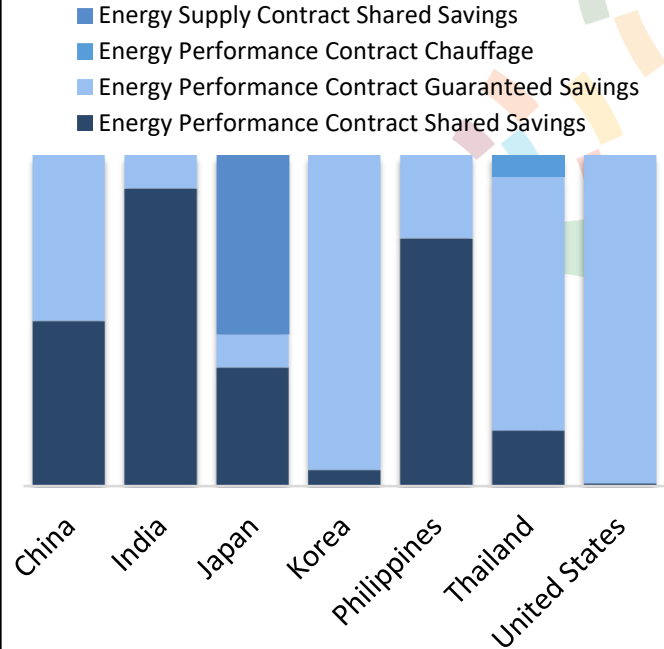
ESCOs Activity by Sector



ESCOs Activity: Public vs. Private



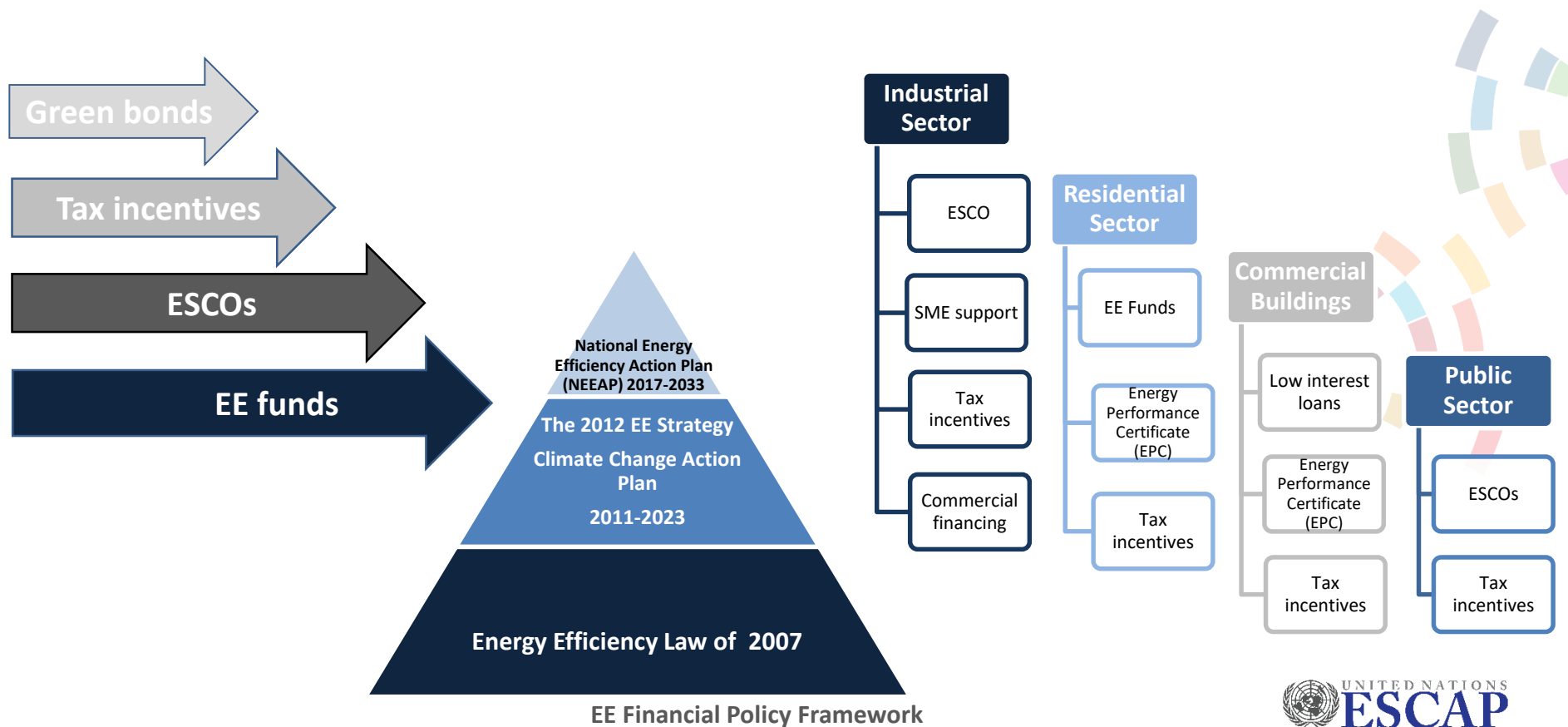
ESCOs Contract Type



ESCAP based on IEA. ESCOs:

https://www.iea.org/topics/energyefficiency/escos/?utm_campaign=IEA%20newsletters&utm_source=SendGrid&utm_medium=Email

Energy Efficiency Financing Mechanisms in Turkey



Key Energy Efficiency Recommendations for the Asia-Pacific Region

- Both public and private sectors can play an important role in financing EE
- Need greater investment and diversification of funds; innovative, market-driven business models are critical
 - **ESCOs**
 - Green bonds
 - Green Banks
 - Innovative loan programs
- EE investment will be particularly important for growing transport sector
- Monitoring and evaluation are critical to success
- Equity and equality considerations in policies and programs

THANK YOU

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