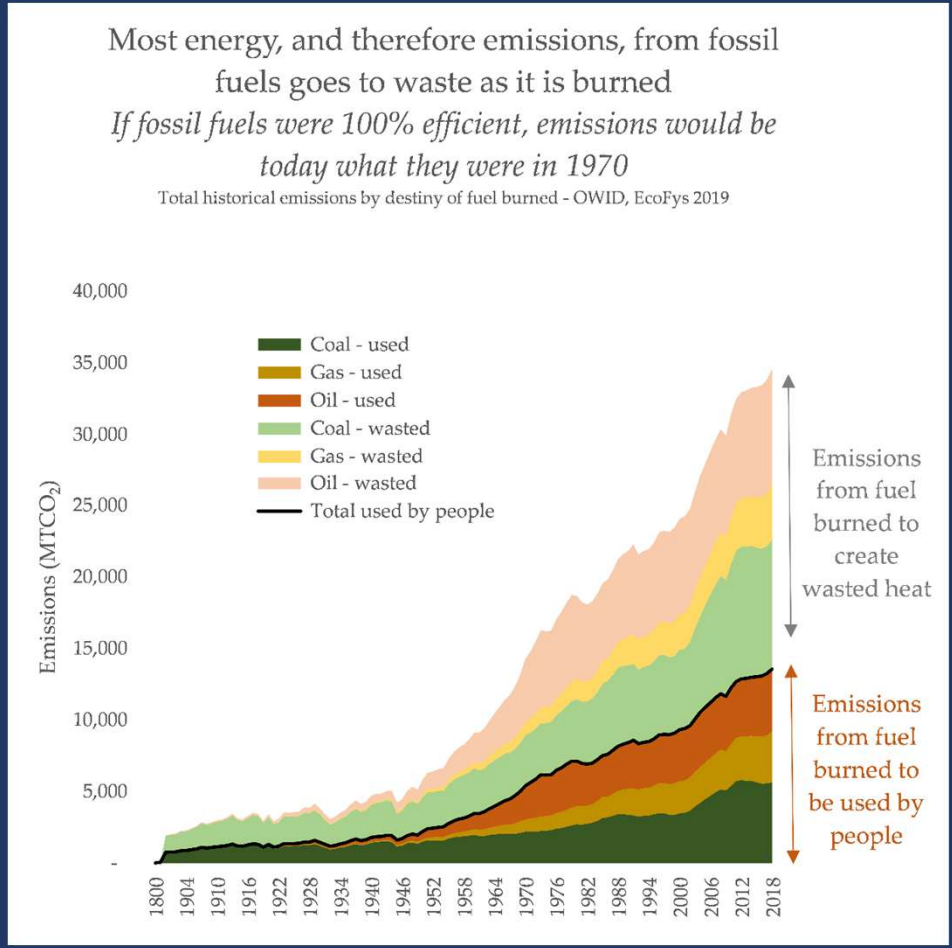


Roles and contributions of ESCOs and Super ESCOs for meeting energy efficiency and climate goals.

The permanent wastefulness of fossil fuels

Source:
Ketan Joshi 2020





- Climate goals ...



Nationally Determined Contributions

- By 2030, annual emissions need to be 15 GtCO₂e lower than current unconditional NDCs imply for a 2°C goal, and 32 GtCO₂e lower for the 1.5°C goal.
- Collectively, current policies fall short by 3 GtCO₂e of meeting the level associated with full implementation
- The emissions gap has not been narrowed compared with 2019 and is, as yet, unaffected by COVID-19.

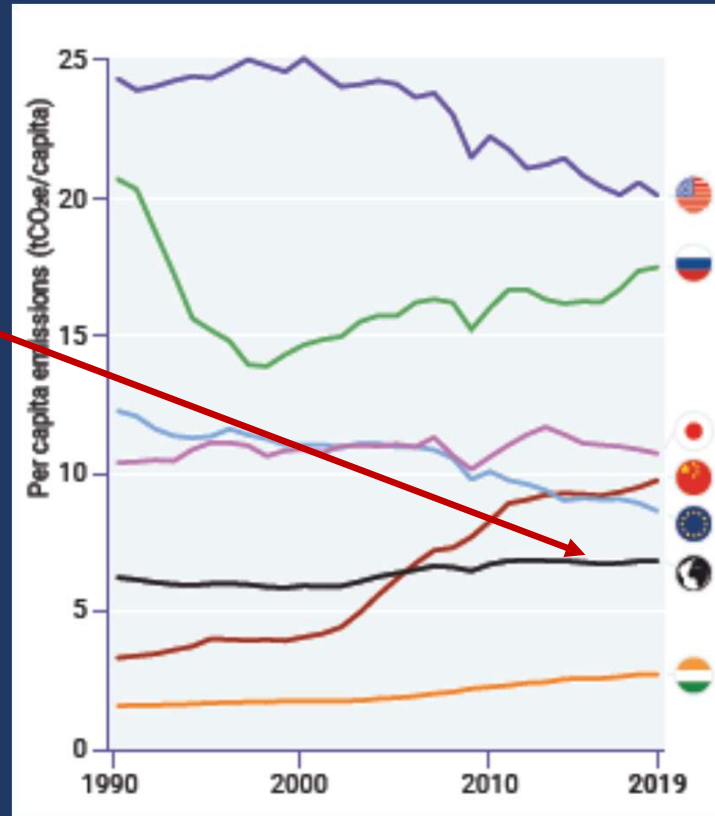
(UNEP: 2020 Emissions GAP Report)

It is, in fact, slated for an historical increase in 2021!



Efficiency gains do not keep up...

The increased demand for energy outstrips efficiency gains and renewables combined



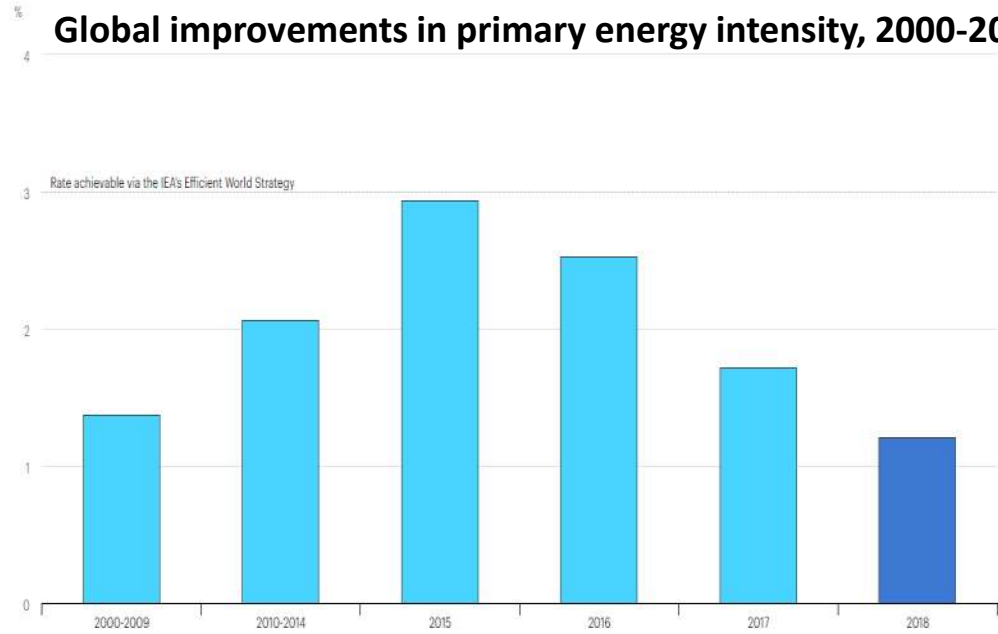
UNEP: Emissions GAP Report 2020



- In 2019, IEA calculated that the World economy's annual reduction in energy intensity had to be at least 3% in order to reach the climate goals of the Paris Agreement.
- At the UN Climate Action Summit in 2019, 15 countries - 4 African - subscribed to this objective (Ethiopia, Ghana, Kenya, Senegal)
- In 2021, IEA raised the number to 4% - on a backdrop of the lowest improvement of global energy intensity for at least 2 decades.



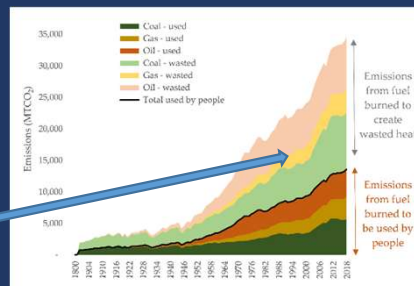
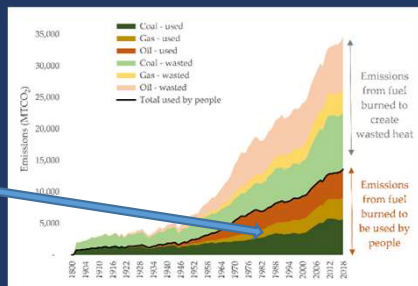
Global improvements in primary energy intensity, 2000-2018



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- Energy Efficiency is very far from delivering on its potential
- We believe the fragmentation of technologies is an important factor
 - There is not one or a few technologies that will deliver, like solar PV and wind
- We need policies for the implementation modality rather than for technologies



- Seemingly, ESCO are legally and regulatorily overlooked in most countries even if their aims are congruent with most of the declared objectives of NDCs (81% of countries mention energy efficiency as a priority in their NDCs).
 - They are occasionally disliked (for profit)
 - Their business model is oftentimes misunderstood (and too good to be true?)
 - They are commonly just neglected



- While countries regularly run energy efficiency promotion campaigns or provide financial support to energy efficient equipment, ESCOs instead are predominantly looking for
 - Definition of specific energy savings targets for public and private buildings
 - Specific legislation for public procurement, tendering and/or auctions, and
 - Creation of specific legislation for the operation of ESCOs and the formulation of EPC contracts.



- ESCOs will assist in taking energy efficiency off government budgets
 - Instead of short-lived and narrowly scoped support programmes, ESCOs can operate profitably with a few financial instruments in place, such as
 - An energy efficiency fund with sole access for ESCOs
 - Specifically incorporate the ESCO model in the implementation of energy efficiency, including its M&E frameworks for documentation
 - Consider the Super ESCO model for inclusion of smaller scale suppliers in the market.



Super ESCOs

- Focused on public sector EE interventions like buildings and municipal utilities
- - they may not be necessary for private sector energy efficiency
- The absence of regulation and the traditional way of organizing things in the public sector are important obstacles for traditional ESCOs
 - including lack of capacity and split incentives
- Standard contracts, when they exist, are oftentimes too complicated for both sides



Super ESCO roles

- Elaborate a strategic plan to address the demand side target it was given
- Realise energy audits of public buildings to identify energy savings opportunities
- Organize procurement, either as turnkey projects through ESCOs (system approach), or by bulk procurement of specific energy-efficient equipment (cherry-picking)
- Finance the procurement of these projects or equipment
- Manage the execution of projects or installation of the energy-efficient equipment
- Verify the energy savings realized



Super ESCOs

- May help smaller ESCOs onto the market
- May absorb some of the risk burden on contracts

But

- Limited experience base
 - EESL
 - UAE + Saudi Arabia
 - Experience in Africa
- Not necessarily welcomed by existing ESCOs



We believe

- that ESCOs are the instrument that makes energy efficiency potentials tangible
- that ESCOs have been overlooked in international climate change advice
- that ESCOs offer the best returns of any climate change motivated action
- that ESCOs in many cases are labour intensive and offer great opportunities to build back better after Covid-19 - with a focus on 'green' and climate change

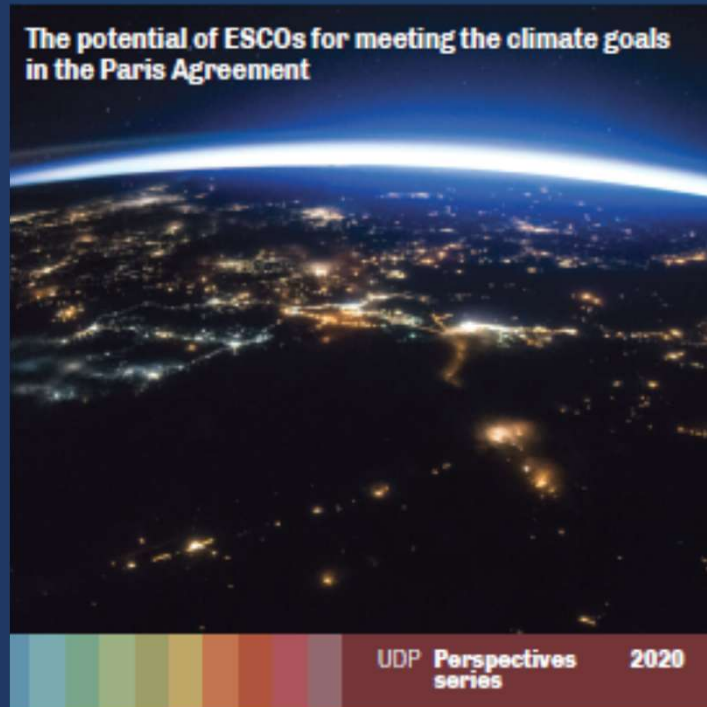
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Incorporating Energy Service Companies in Nationally Determined Contributions

The potential of ESCOs for meeting the climate goals
in the Paris Agreement



Incorporating
ESCOs in NDCs



Thank you for your attention!

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