



4TU ALLIANCE ON ENERGY ACCESS

- EST. APRIL 2023 -



THE “4TU ALLIANCE ON ENERGY ACCESS”

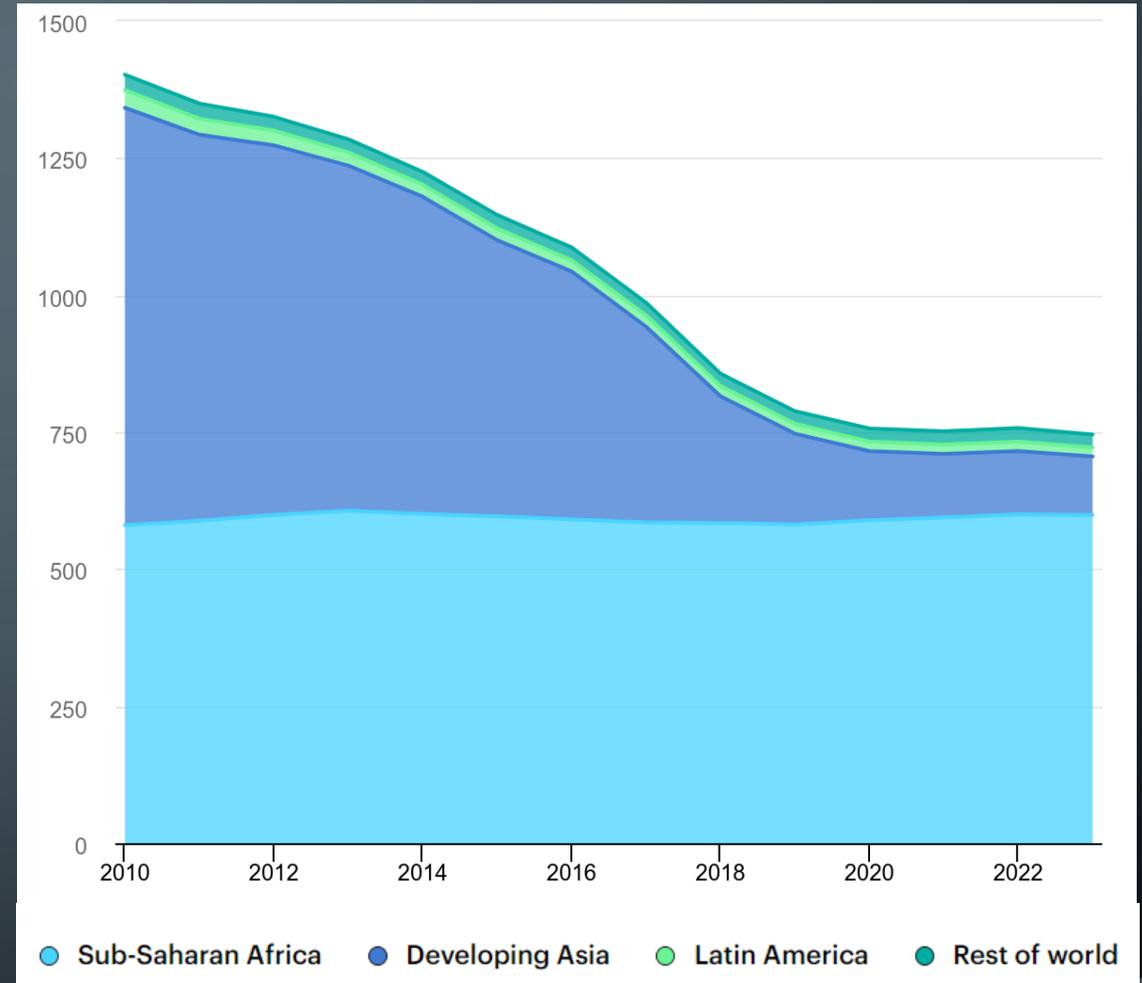
WHY, WHAT, HOW?



and
more...

WHY?

- Despite significant progress, close to 800 million people still lack *any* access to electricity
- Many more lack sufficient, reliable, durable, resilient and envir. sustainable access
- Progress is stalling



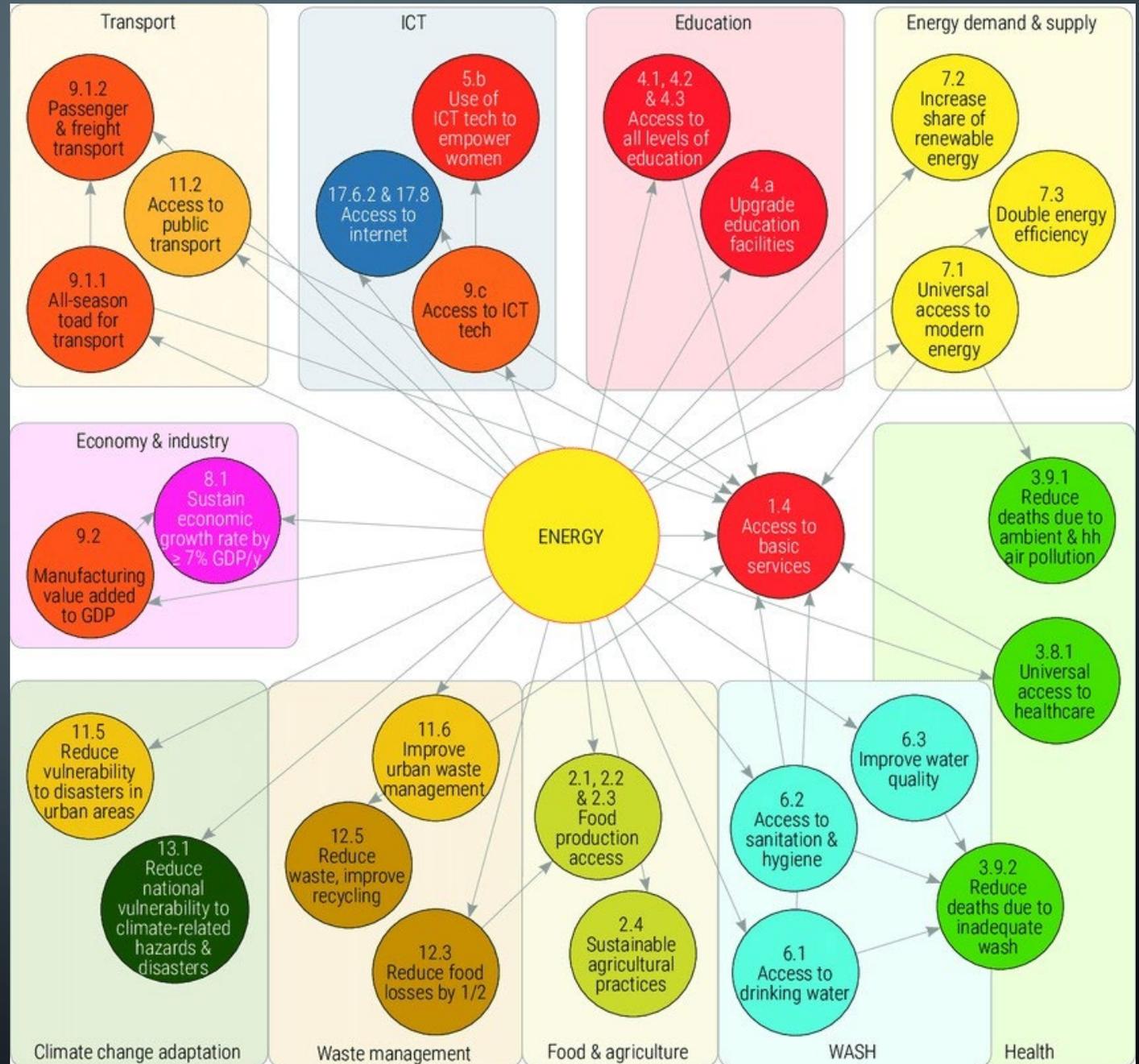
International Energy Agency, 2023

MORE WHY ...

- >2.6 billion people still lack access to clean cooking
- As if this is not enough, this is a big underestimation of the actual lack of access
- Huge affordability, scalability, sustainability issues



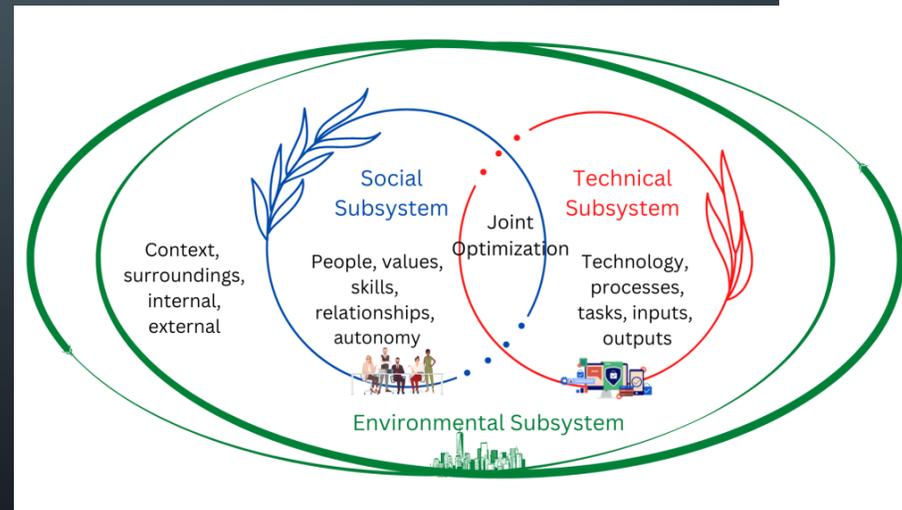
IMPACTS FROM IMPROVED ACCESS



<http://www.unescap.org/sites/default/files/publications/Energy%20Transition%20Pathways-RTR%202018%20Web.pdf>

4TU ALLIANCE AMBITIONS

- Help accelerate access to 2030 (the final year of current SDG program), and look beyond 2030
- Shorten cycles between knowledge creation and innovation, policy making and mobilizing investments towards reaching impact at scale
- Contribute with transdisciplinary research and education





WHAT DO WE HAVE TO OFFER?

- Transdisciplinary approach for illuminating the ecosystem spanning from problem to solution.
- Knowledge co-creation for sustainable, just, context-appropriate solutions for a broader societal impact.
- Contribute to reflexive and science-based interventions to facilitate environmentally and socially responsible solutions.
- Our most important asset - students eager to work on sustainability topics with impact
- Our most important expertise: we are educators



WHAT CHANGE DO WE WANT TO BRING TO THE CURRENT SITUATION?

- Increase knowledge adoption and learning through co-creation with stakeholders
- Lobby for a new way of knowledge development and education that is more impact-driven
- Contribute to discourse & implementation of the energy transition as a shared global development challenge, transcending the North-South divide

HOW DO WE WANT TO DO THAT?

- MSc theses on energy access
- Joint (MOOC) course on energy access & sustainable development
- PhD candidates for longer-term research
- Broader outreach of academic output
- At least 1 local living lab with a partner institute per region



WHAT CAN WE DO AS AN ALLIANCE?

- Lobby for resources to do academic work with SDG7 access impact
- Network, e.g., with NL Energy Compact parties (govt, private sector, NGOs, financial actors)
- Explore joint opportunities, e.g. to involve in joint consultation and as partners in innovation calls ...
- ...that keep us strongly focused on core challenges by exposing us to what is going on in practice



WHAT DO WE BRING?

- Insight in how context matters, and in generic principles that can be upscaled
- Access to multiple disciplines, methods, and data for balanced research that is relevant for project & policy practice
- Our individual networks
- Inspiration based on a long-term vision for a just and responsible energy transition



FIRST ACTIVITIES

1. Development of a Joint White Paper and participation in a virtual UN consultation for the SDG7 UN Global Stocktake, focused on 7 perspectives:
 - Towards impact (instead of output) measurement for progress tracking
 - Addressing pervasive mismatches between energy demand & supply
 - The need for localization of technical and managerial capacity
 - Operationalizing energy justice
 - Incorporating resilience
 - Going beyond the dominant focus on household energy access
 - Increasing the learnings from past policies
2. Participation in the 4TU Honours Challenge course
3. Liaising with the non-academic NL Energy Compact community



Interested?

Come
join us!



More info on:
<https://www.4tu.nl/energy/news/4tu-alliance-on-energy-access/liance-on-Energy-Access>

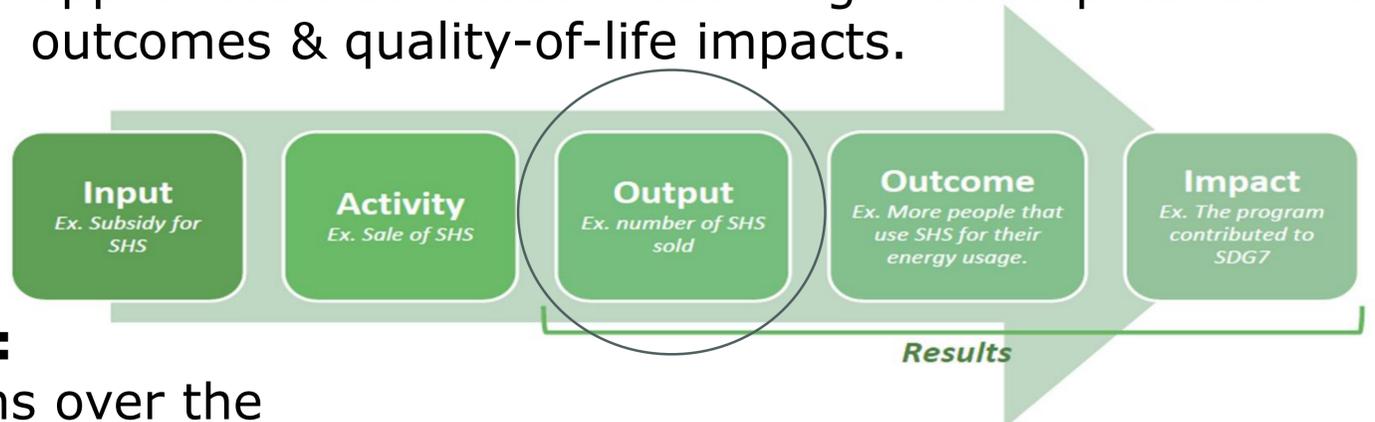
From output indicators to impact measurement in SDG7

Henny Romijn (TU/e) in collaboration with the 4TU Alliance on Energy Access



The problem:

Progress towards universal energy access is captured with simplified output indicators: numbers of appliances distributed. Assuming that outputs lead to outcomes & quality-of-life impacts.



Adverse effects:

“Throwing systems over the wall”, as quickly as possible:

- Minimizing access levels
- Neglecting sufficiency, sustainability, affordability, and resilience of access
- Unbalanced financing: subsidies go to (often Western) parties with established sales upscaling capacities,
- while greater local capacities are needed to adapt technologies to local contexts and avoid premature failure.

Research question:

How can mission drift in SDG7 be avoided through improved metrics?

Methods:

- *Literature review* on pros & cons of goal-driven & indicator-led programs.
- *Interviews* with aid donors, SDG7 project implementers and subsidy recipients, in MSc & PhD research.
- *Learning-by-doing*: involvement in technology transfer & improvement projects by staff and students

