Humanising energy transition: closing the gap

IEF – IRENA
20 February 2020
World Energy Council

- Established in 1923
- First pragmatic “how to” global energy transition community
- Technology and resource neutral, apolitical
- We embrace a broader community to enable sustainable energy future for all.

“Practical men and women might all advance together”
D.N. Dunlop, in Forward, Transactions of the First World Power Conference, 1923
Energy transition has entered a new era

*Increasing social complexity - a disruptive and accelerating pace of change*

ENERGY FOR PEACE
(Nations & Engineers)

ENERGY FOR GROWTH
(Markets and/or States)

ENERGY FOR HUMANITY
(Active Customers, Cities, Transition Communities)

1923

Post WW2

2022
Issues Monitor 2020: OPEC map

Critical uncertainties: what keeps energy leaders awake at night
Action priorities: what keeps energy leaders busy at work

Less urgent More urgent Centre-point line

Embargoed until 26th Feb 2020
## Contrastable perspectives

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There are now 19 large-scale CCS in operation globally, four under construction, and 28 in various stages of development.
The risk of fragmentation...

What is the key priority for your country’s energy transition?

- UNSDG Agenda
- Climate change and environment
- Affordability and social justice
- Energy security

Percentage distribution:

0% 5% 10% 15% 20% 25% 30% 35% 40% 45% 50%
The rise of a broader social impacts agenda in all regions

COSTS GO DOWN

PRICES GO UP

LCOE of renewables ($/MWh)

Electricity prices trends (Cent/MWh)

Source: World Energy Council Japanese Member Committee, METI, IEA
The renewable electrification revolution needs friends 😊

Better understanding hydrogen

2.3% of hydrogen share of final energy (10.5EJ annual production)

Enabling new pathways that accelerate uptake of hydrogen

- Avoiding hydrogen bubble
- Building new ecosystem
- Addressing social issues & policy cohesion
- DEMAND PULL

Hydrogen Global: Demand aggregator

- Supply push
Active customers need to be engaged in closing the gap!

How much do you think your actions can help reduce emissions from energy?

- None at all: 1.6%
- A moderate amount: 32.0%
- A little: 18.7%
- A lot: 28.4%
- A great deal: 19.3%

What steps are you willing to take to help decrease your emissions?

- Switch to energy efficient appliances
- Switch to efficient air conditioning
- Invest in better insulation for your home
- Line-dry your clothes
- Smaller screens for your TV & computers
# HUMANISING ENERGY TRANSITION

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