



WORLD SUSTAINABLE DEVELOPMENT SUMMIT

MAINSTREAMING SUSTAINABLE DEVELOPMENT AND CLIMATE RESILIENCE FOR COLLECTIVE ACTION



VIRTUAL DIALOGUE ON INCLUSIVE ENERGY TRANSITION & SDG 7

Date: 22 September 2022 | Time: 2:00 – 4:00 p.m. (IST)

Framing Presentation and Preliminary Findings of TERI Study



ENERGY



AGRICULTURE



ENVIRONMENT



HABITAT



RESOURCE SECURITY



CLIMATE



HEALTH & NUTRITION

Partner Acknowledgment

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Federal Ministry
for the Environment, Nature Conservation,
Nuclear Safety and Consumer Protection

IKI
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CLIMATE INITIATIVE



TATA CAPITAL
Cleantech Finance

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SDG Charter

- Act4Earth was launched at the WSDS 2022 valedictory session with an objective to drive ambitious and urgent action on climate change and sustainable development through knowledge, dialogue and capacity building
- Act4Earth platform's two components:
 - COP Compass
 - SDG Charter
- SDG Charter: Ccontributes to more inclusive and ambitious policy frameworks towards green recovery policies and actions of governments that enhance environmental, social, and economic outcomes to build back better.



Narratives

- The concept of **‘Just Transitions’** in the context of energy supply, especially around coal, has been gained discursive traction.
- According to the ILO, Just Transition involves moving towards a low carbon economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.
- At the COP26 multilateral development banks (MDBs) issued a joint statement communicating that they would support Just Transitions and climate change mitigation in communities, regions, and sectors directly impacted by the clean energy transitions.
- International Energy Agency (IEA) has moved to people centred transitions – “employment, equity, inclusion, affordability, access and sustainable economic development at the centre of the process”.

About Study

Rationale

- Energy consumption for G20 is rising and will continue to rise for the developing countries/ emerging economies
- Most of the policies are addressed towards energy supply side
- Energy demand side interventions are an emerging area. Inclusive energy transitions need to examine both supply and demand

Gap

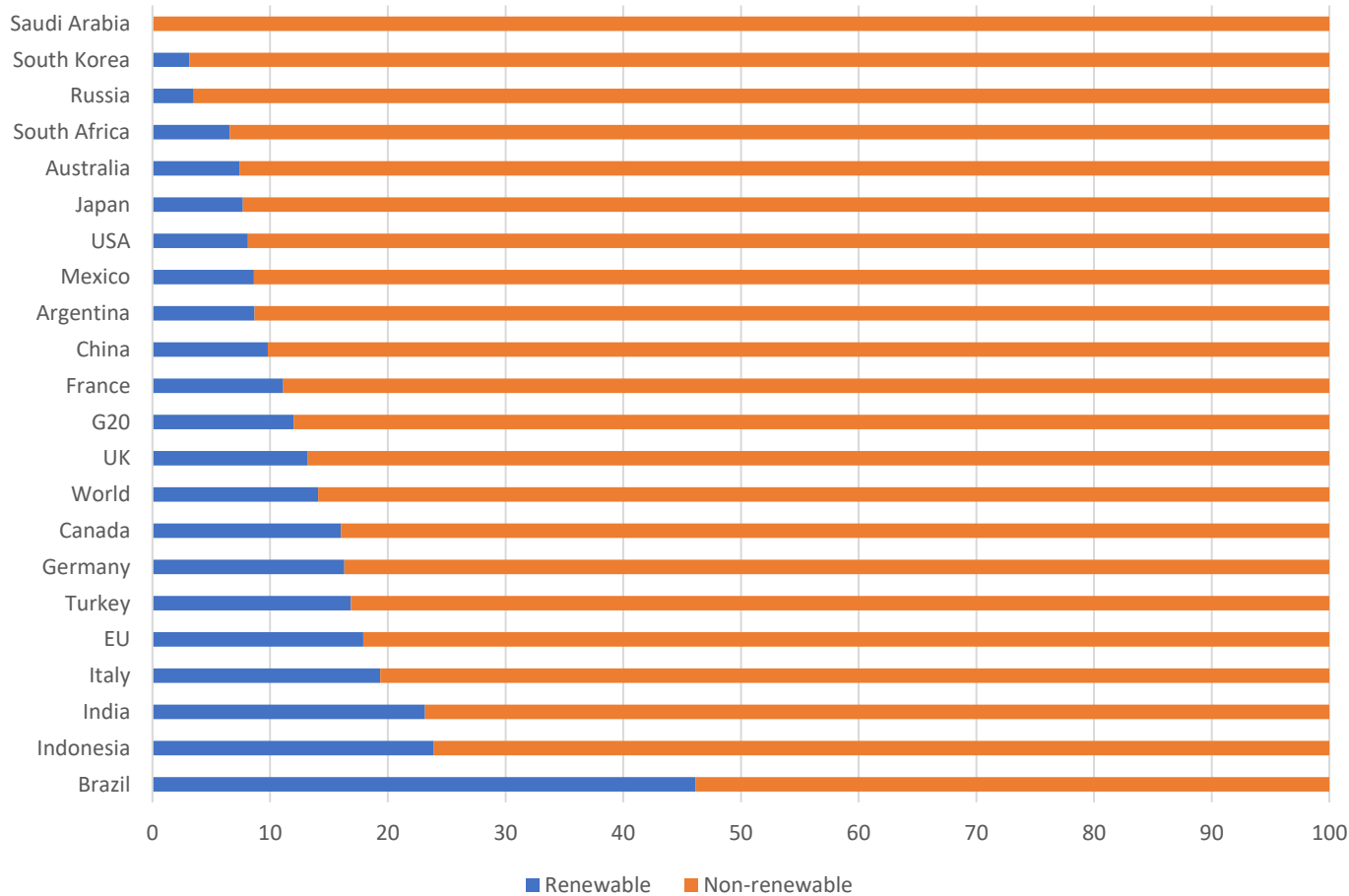
- Demand side interventions with respect to inclusiveness

Aim

- Analyze policy instruments and trends for inclusive energy transitions from energy system demand perspectives in agriculture, MSMEs and transport sectors for G20 countries

Energy Supply Trends in G20

Percentage Share of Renewable and Non-renewable Sources in Energy Supply for G20, 2019



The percentage share of renewable energy for G20 is 12% in total primary energy supply

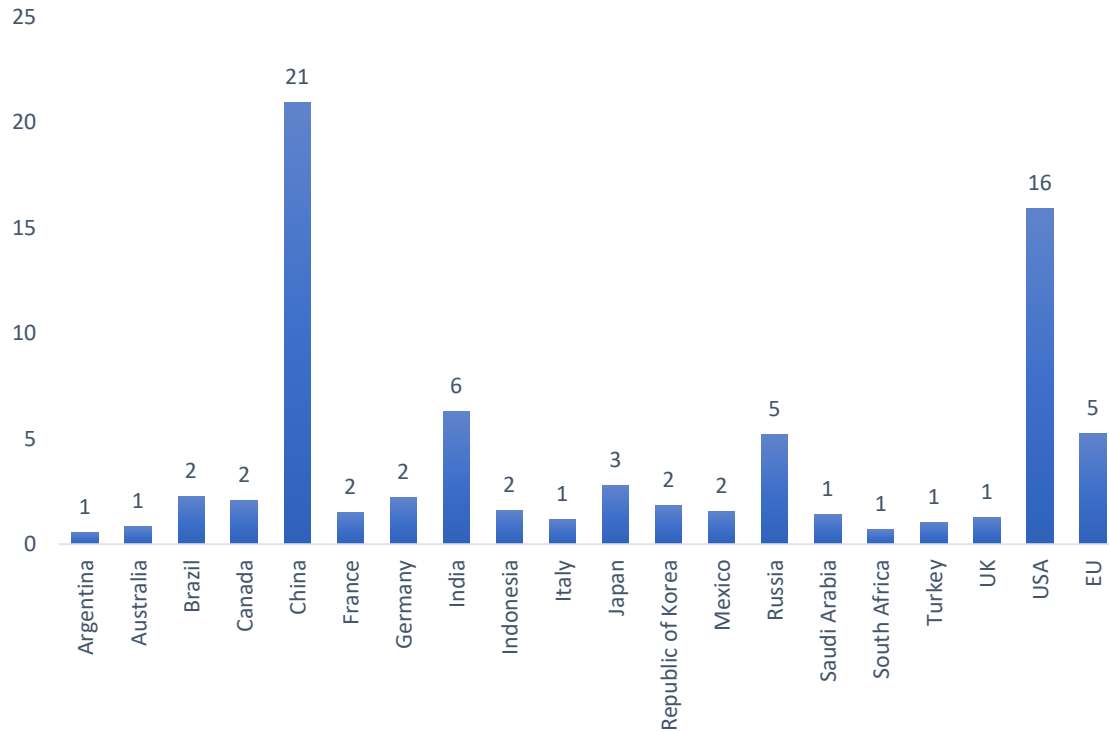
Top three countries with the highest renewable energy share are:

- Brazil
- Indonesia
- India

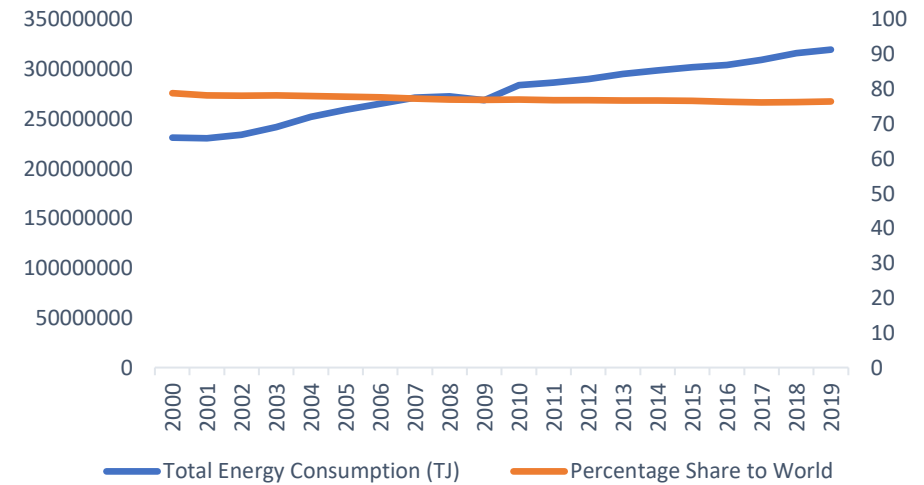
Source: Calculations based on IEA (2022)

Energy Demand Trends in G20

Percentage Share of G20 Countries' Energy Consumption to World, 2019



Energy Consumption Trends in G20

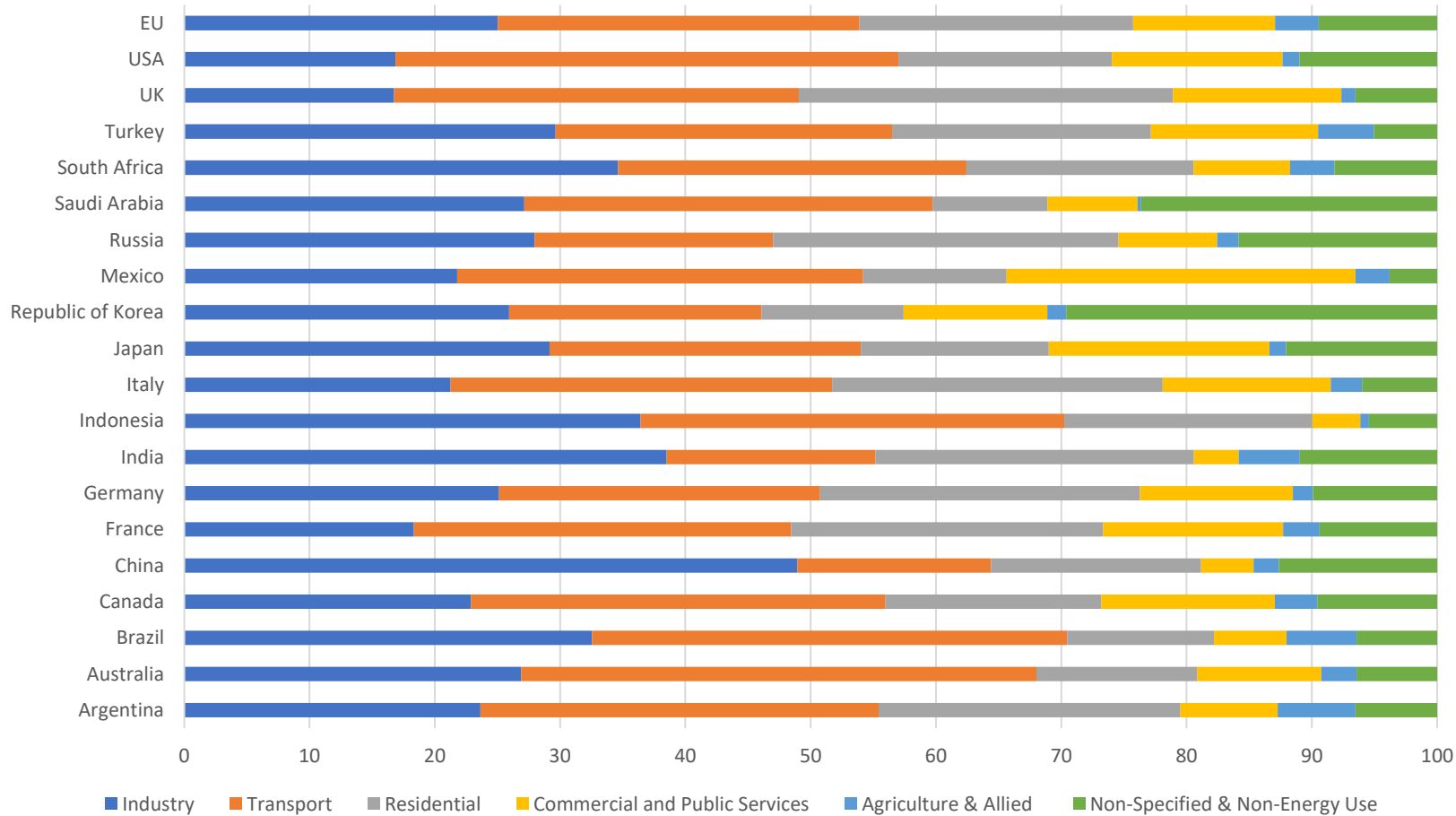


The percentage share of energy consumption of G20 to world's energy consumption is around 76-78%

Source: Calculations based on IEA (2022)

Energy Demand Across Sectors in G20

Percentage Share of Energy Consumption of G20 Across Sectors, 2019



The percentage shares of energy consumption are significant for industry and transport sectors, while it is minimum for agriculture & allied sector

Source: Calculations based on IEA (2022)

Energy Demand Trends Across Sectors

Among G20 countries, the percentage share of energy consumption is highest in China, USA, India, EU, and Russia.

China

- The energy consumption is significantly high in the industry sector
- Declining trend from 2014 onwards & almost constant from 2017 onwards

USA

- Transport sector consumes highest energy
- Almost constant trends over the period of 2000-2019

India

- The energy consumption is highest in industry and residential sectors
- Increasing trend in industry sector and declining trend in residential sector

EU

- The energy consumption is highest in industry, transport, and residential sectors
- Declining trend in industry, rising trend in transport, and almost constant trend in residential

Russia

- Industry, transport and residential sectors consume the highest energy
- Trends in all sectors are almost constant around 20-30%

Policies in Agriculture

- Energy is required in each step of the agricultural value chain from inputs to end-users
- Focusing on demand side perspective of agricultural production
- Energy transition required in irrigation system, on-farm mechanization, greenhouse temperature control, for space and water heating, crop drying, lighting, ventilation, refrigeration, etc.
- Main use for electricity is for irrigation purposes
- Policy instruments: Subsidizing solar irrigation system – solar panel along with solar supported pumps
- In most of the G20 countries, solar irrigation system has been subsidized
- In developed countries, clean technologies on the demand side is market-driven

Policies in MSMEs

- Most policies are aimed to make clean energy practices more affordable for MSMEs by improving their access to credit, providing subsidies, energy audits, and training programmes
- Credit guarantee in India under India's Credit Guarantee Scheme
- Funding for projects that use clean energy practices, like that provided by Australia's Clean Energy Finance Corporation
- Training schemes or information support to help MSMEs through policies such as the UK's Business Climate Hub and South Africa's training schemes in the agrifood sector to help train them to use and identify more clean energy practices
- Japan uses energy audits to help MSME's identify ways in which they can improve their energy efficiency

Policies in Transport

- Most of the policies implemented by G20 members to achieve clean energy transitions in the transport sector are aimed at either making sustainable transport more affordable or improving the quality and convenience of sustainable transport infrastructure
- Affordability has been addressed by fiscal incentive
 - through subsidies such as countries providing subsidies so that consumers can purchase electric vehicles for less money
 - through tax rebates and tax benefits to make the targeted products cheaper than less sustainable products. For example, exemptions from import tax duty on EVs and less tax on CNG compared to diesel and petrol
- Governments also invest in electric vehicle charging and CNG refuelling infrastructure to improve the convenience of using electric and CNG vehicles

Social Inclusion – Gender

- Studies emphasized that demographic and socio-economic characteristics are the driving factors in inclusive energy transition
- Most important inclusion – gender
- Renewable energy offers more scope for inclusion than conventional energy systems – the bottom-up approach adopted typically in decentralised renewable energy projects lead to greater autonomy and opportunities for inclusion of women and other marginalised groups as demonstrated by several studies
- Gender disparities have rarely been addressed as part of national energy policies and only a few energy policies have included gender mainstreaming in their frameworks – specifically in agriculture, MSMEs, and transport

Gender Inclusion in the 3 Sectors

- Measures to empower women is significant in agriculture – the index for Bangladesh is 0.749 and for Western Highlands Guatemala in Mexico is 0.692
- In MSMEs, around 13.5-15.7 million or 20% of all enterprises are owned by women (as per the 2019 Google-Bain report)
- Hardly half of the women population of a developing country, like India, avail public transport, may be due to factors of affordability, safety, etc.
- Despite women's contribution in these three sectors, very few policies are in implementation
- Almost no such policy exists to our knowledge that include women empowerment in agriculture, specifically related to irrigation system, where it holds immense potential
- Very few countries under G20, such as India, Italy, Switzerland have credit support policies for women-headed MSMEs
- Under transport sector, only India and Mexico have addressed the issues of affordability and safety of women, respectively in public transport

Gender Inclusion & Clean Energy Transition: Lens of Media Reportage

Overview

- Media reportage on women and energy transition attempts to capture an inherent complexity - though women are the direct beneficiaries of many clean energy initiatives, historical limitations restrict the scope of their role

Key Challenges

- Media reports on the gender implication of clean energy demand side policies in agriculture, MSMEs and transport sectors are few. The need is to create conversations addressing this gender perspective in the media

Suggestions

- Covering more reports from the ground on clean energy demand interventions in the agriculture, MSME's and transport
- Sensitization workshops for journalists on gender equity in the energy transition
- Gender focus by the media on the aspect of policies on energy transition

Recommendations

- Missing dimension of inclusion in demand side clean energy transitions in the dominant discourses
- Inadequate policy instruments to consider inclusiveness aspects
- Inadequate policy implementation in agriculture sector for inclusive energy transition
- Reliability issues need to be addressed for promotion of demand measures
- Missing gender disaggregated data on clean energy transitions, specific to agriculture, MSMEs and transport sectors
- Addressing the normative gap through media

Thank you... 😊
