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Summary of the High-level Dialogue on Energy Technical Working Groups: 22 February – 26 May 2021

The High-level Dialogue on Energy, scheduled to take place in September 2021, will be the first global gathering on energy under the auspices of the UN General Assembly (UNGA) since the UN Conference on New and Renewable Sources of Energy in 1981. The Dialogue, which the UN Secretary-General will convene at summit level, seeks to promote implementation of the energy-related goals and targets of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals (SDGs) and the Paris Agreement on climate change, as well as to accelerate ambition towards the achievement of SDG 7 (affordable and clean energy).

The High-level Dialogue on Energy is structured around five themes: energy access; energy transition; enabling SDGs through inclusive, just energy transitions; innovation, technology and data; and finance and investment. In preparation for the Dialogue, a series of multi-stakeholder Technical Working Groups were established for each theme to bring together technical experts to prepare a report with substantive recommendations for Ministerial-level Thematic Forums. These Forums will take place from 21-25 June 2021.

The Technical Working Groups brought together actors from UN and international agencies, national governments, and business, academic, and civil society organizations. The participants were reminded that the last global gathering in the UNGA to address energy, in 1981, took place when the world was in the middle of an energy crisis, and the 2021 Dialogue is taking place in the midst of multiple crises that require us to change the way we approach the energy agenda. Three virtual meetings of each Technical Working Group took place, with the first meeting focused on adjustments to the reports' outlines, the second focused on comments on the first draft, and the third collecting final comments on a revised draft report.

The report on energy access emphasizes that access to electricity and clean cooking are equally important. It further highlights the need to: address socioeconomic inclusiveness; align costs, reliability, and affordability of energy services; put people at the center of efforts to deliver energy; and promote local entrepreneurship and target the engagement of women and youth.

The report on the energy transition notes that enhanced international and regional cooperation are needed to share technology and integrate power markets, among other actions. Among the report's eleven recommendations are calls to rapidly scale up the deployment of renewable energy, improve the average rate of energy efficiency, and phase out coal.

The report on enabling SDGs through inclusive, just energy transitions addresses the multidimensions of the SDGs. The Group's discussions stressed the need for implementing policies with attention to social equity and inclusiveness, and called for education, reskilling, training, capacity building, promotion of informed consumer behavior, and accelerating actions to ensure gender equity.

The report on innovation, technology and data recognizes the need for innovations in policies and finance, and not just in technologies. It recommends: commercializing new technologies at scale; creating markets that favor energy technologies and help with the energy transition; leveraging digitalization; and improving the collection, management and application of data systems.

The recommendations in the report on finance and investment include: countries should boost investment in sustainable energy to achieve an inclusive recovery; finance flows should be congruent with increasingly ambitious climate strategies; subsidies that encourage wasteful use must be removed; local markets for sustainable energy finance must be developed; and better use should be made of blended finance schemes.

These reports will be launched during the Ministerial Forums.

A Brief History of the High-level Dialogue on Energy

Through resolution 74/225, the UNGA invited the Secretary-General, with the support of the relevant UN system entities, to convene a high-level dialogue in 2021 to promote implementation of the energy-related goals and targets of the 2030 Agenda for Sustainable Development in support of implementation of the UN

In This Issue

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Decade of Sustainable Energy for All (2014-2024), including the global plan of action for the Decade, and the High-level Political Forum on Sustainable Development (HLPF).

The Under-Secretary-General for Economic and Social Affairs, Liu Zhenmin, is serving as the Dialogue Secretary-General. The UN Department of Economic and Social Affairs, through the Division for Sustainable Development Goals, is serving as the Secretariat for the Dialogue and is engaging the UN-Energy secretariat in preparations. The UN-Energy Co-Chairs (Achim Steiner, Administrator of the UN Development Programme, and Damilola Ogunbiyi, Special Representative of the Secretary-General for Sustainable Energy for All) are serving as Dialogue Co-Chairs.

The High-level Dialogue will be structured around five overarching themes, each of which is supported by a multi-stakeholder Technical Working Group. These Groups have produced Thematic Reports containing substantive recommendations on issues related to their themes: energy access; energy transition; enabling SDGs through inclusive, just energy transitions; innovation, technology and data; and finance and investment. The Groups are each supported by three or four UN agencies, a number of national governments serving as "Global Theme Champions," and numerous experts who participated in a series of three meetings for each Group. In the preparation of these reports, the Groups aimed to contribute towards an action-oriented SDG 7 roadmap to 2030 in support of the 2030 Agenda and the Paris Agreement.

The work of the Technical Working Groups will feed into the Ministerial Thematic Forums, which will seek to gain insights on priority issues under the five themes and provide inputs into the Dialogue itself. The Dialogue will seek to bring together world leaders from Member States and other stakeholders at the highest possible level from all regions and sectors.

Additional outcomes expected from the Dialogue include voluntary commitments from Member States and other stakeholders in the form of "Energy Compacts." These compacts will identify key outcomes, milestones, and implementation timelines, with clear tracking frameworks towards 2030.

It is expected that the Dialogue outcomes will inform forthcoming intergovernmental processes, including the Decade of Action to deliver the SDGs, the High-Level Political Forum on Sustainable Development (HLPF), and UN Glasgow Climate Change Conference, as well as follow-up actions from the Global Sustainable Transport Conference, the UN Ocean Conference, the UN Biodiversity Conference, and the Food Systems Summit.

Report of the Technical Working Groups

Minoru Takada, Team Leader, Secretariat of the High-level Dialogue on Energy, UN Department of Economic and Social Affairs (DESA), welcomed Technical Working Group participants to the first session on 22 February 2021. He introduced the objectives of the Working Group, highlighting that the UNGA would be considering the global energy agenda in September 2021 for the first time since 1981. He recalled that five Technical Working Groups would consider five themes in preparation for the UNGA's High-level Dialogue on Energy. Each Group, he said, will seek to identify roadmaps and pathways to achieve SDG 7 by 2030 and net-zero emissions by 2050, as called for in the Paris Agreement. He said the Technical Working Groups are expected to complete their work by May 2021, with their reports feeding into five Ministerial thematic forums taking place in June 2021.

The first of three sessions for each Technical Working Group took place between 22 February 2021 and 2 March 2021. Participants were called on to provide their initial thoughts on a proposed outline for their Group's report.

The second sessions for each Technical Working Group took place between 13-20 April 2021. Following an overview of the draft report by a co-lead organization, the Technical Working Groups split into three breakout groups to exchange views on the draft report. Rapporteurs then reported back on the main points discussed in each group and participants offered further comments.

During the third sessions for each Technical Working Group, which took place between 12-26 May 2021, participants offered their final comments on the draft reports.

All of the Technical Working Group sessions convened online due to the global pandemic. All of the discussions took place under Chatham House Rules. Accordingly, our summary of the discussions in the three sessions for each Group focuses on the ideas and recommendations presented, without identifying the speaker. We begin with an overview of the three topics the Groups addressed in common.

First, in addition to commenting on the specific challenges related to their Groups' topic, participants also acknowledged the breadth of their topic and ways in which it overlapped with the topics of the other four Technical Working Groups. Speakers recognized the complexity of the relationships among the issues, and highlighted the opportunity for this process to highlight the need for a holistic approach to address the energy agenda. Many suggested the recommendations in the reports be harmonized.

Second, each Group discussed timeframes. In reference to calls to address the needs of future generations, speakers stressed the need for actions to happen now and not be pushed down the road. In this regard, it was also noted that this timeline means the focus should be on existing technologies, especially in regard to achieving the 2030 objectives. In reference to the 2050 timeframe for achieving net-zero emissions, some speakers said the necessary technologies still need to be developed, highlighting the importance of recommendations addressing technology and innovation. Further illustrating this point, during a discussion on the importance of innovation, a speaker stated that 50% of the technologies needed to achieve the 2050 objectives are now at the pre-commercial demonstration stage.

A third topic that came up in all of the Groups was the balance would need to be found between the technical drafting process to develop the reports and the political process that would receive the reports. A speaker pointed out that the reports are being developed in a UN setting, which means they will need to "sit well" with all 193 Member States. In this regard, a speaker noted that the discussions provided a preview of what to expect during the Ministerial Thematic Forums, which will take place from 21-25 June 2021.

Technical Working Group on Energy Access

The lead organizations for the Technical Working Group on Energy Access were: the UN Development Programme (UNDP), the UN Office of the High Representative for the Least Developed, Landlocked Developing Countries, and Small Island Developing States (UN-OHRLLS), and the World Bank.

The **first meeting** of the Technical Working Group on Energy Access took place on 24 February 2021. Damilola Ogunbiyi, Special Representative of the UN Secretary-General for Sustainable Energy for All, Co-Chair of UN-Energy, and Co-Chair of the High-level Dialogue on Energy opened the meeting. She welcomed the 92

participants to the online dialogue, and emphasized that if we do not achieve SDG 7 by 2030, we will not achieve the Paris Agreement's objective of net-zero emissions by 2050.

Speakers discussed how to accelerate electrification and clean cooking, and called for complementing top-down planning for expansion of the grid with a bottom-up focus on end users' needs. Some noted the need for planning processes to include those who ultimately pay for energy services, while others suggested moving beyond a focus on energy access to consider how to improve reliability.

Several speakers said the fact that many people lack access to energy needs to be framed as an "unacceptable problem." A number of participants highlighted the need to create new business models. Some stressed the need to consider the role of regulatory business models as well as that of regional power trading as an option to increase supply in some areas.

The need for resources, from concessional finance to philanthropic funds, was underscored. One speaker noted that a starting point for action is for governments to move away from fossil fuel subsidies. Participants also discussed a need for "smart subsidies" to ensure no one is left behind.

Many stressed the importance of a gender lens. The perspectives and contributions of children and youth were also highlighted as important for achieving a clean energy transition.

Participants discussed the importance of learning and capacity building. One said national electrification plans need to be dynamic and updated, which requires ministry officials to be trained and able to correctly estimate energy demand. A role for universities and students in exploring new issues and models was highlighted as a way to develop solutions to existing challenges.

Many speakers touched upon a role for data in achieving universal energy access. They noted it should be used to increase the efficiency of energy use. A speaker suggested building utilities' capacity to use data they already collect.

Speakers emphasized the need to focus on "last-mile" efforts needed to ensure no one is left behind. They discussed the need to consider this issue from the perspective of the hardest groups to reach, to focus on adding value for those living off the grid, and to involve users in the search for solutions.

With regard to clean cooking and cook stoves, the use of natural gas for cooking and heating was noted, and participants were asked to develop specific recommendations for these sectors, especially in poorer countries. One speaker called for plans based on country-specific needs. Another highlighted the opportunity for global leaders to call for action on this issue.

The **second virtual meeting** took place on 19 April 2021, after the co-leads had circulated a draft of the Group's report, drawing 74 participants. Many speakers emphasized the need to bring the socioeconomic considerations to the beginning of the report and to "give a human face" to energy access challenges by "telling the story differently." A wider focus on inclusion, displaced populations, considerations around youth, and capacity building was proposed. For example, gender issues could be framed as questions of sustainable livelihoods rather than "women collecting firewood," they said.

On clean cooking, speakers noted the need for an integrated approach. They suggested we ensure that products are designed with the end user in mind. Another speaker noted that the layout of the kitchen and its ventilation can play an important role in whether cooking will produce indoor air pollution.

On electrification, speakers suggested a regional and geographical focus in describing current challenges, noting that the greatest challenge is in fragile, rural areas. Participants called for disaggregated data, including on rural and indigenous communities.

During the **third meeting**, on 12 May, 74 participants considered the revised draft of the Technical Working Group's report, and offered further comments. The text identified the following building blocks for an energy access paradigm shift:

- reinforce enabling policy and regulatory frameworks;
- make energy access inclusive socially and economically;
- align the costs, reliability, quality, and affordability of energy services; and
- catalyze, harness, and redirect energy access financing.

Speakers expressed support for the changes to make the report more people-centered, and focused on actions and recommendations, rather than challenges.

They highlighted the role of the private sector in delivering energy services, with one suggesting specifying the enabling environment to help the private sector thrive. Another suggested adding a reference to the need for partnerships between government and industry.

Participants also discussed the need for country-specific energy pathways. On setting targets, a speaker said this should be a bottom-up country process, not a top-down "numbers process."

On affordability, one speaker asked if an affordability target, such as "energy access should not cost more than x% of household budgets," could be added. In this regard, the need to focus on cost of service rather than cost to consumer was noted, to avoid introducing subsidies. Another speaker called for reference to safety nets.

On finance, a speaker noted the challenge of making financing strategies more people-centered.

The report of the Technical Working Group will be launched during the Ministerial Thematic Forum on Energy Access, on 21 June.

Technical Working Group on Energy Transition

The lead organizations for the Technical Working Group on Energy Transition were: the International Renewable Energy Agency (IRENA), the UN Economic and Social Commission for Asia and the Pacific (ESCAP), and the UN Environment Programme (UNEP).

Francesco La Camera, Director-General, IRENA, welcomed approximately 75 participants to the Group's **first virtual meeting**, on 22 February 2021, and highlighted the opportunity to accelerate the energy transition as we recover from the COVID-19 pandemic.

During the open discussion, many speakers emphasized the need for the Group's report to reflect the urgency of achieving an energy transition. They highlighted that renewables and energy efficiency are well-known solutions, but the report should underscore the need to push harder for progress in order to achieve the Global Goals.

Speakers stressed that a just transition should incorporate socioeconomic considerations, with the principles of equity, fair shares, and leaving no one behind as guides for the phase-out of fossil fuels and transition to new energy sources.

Africa's Agenda 2063 was highlighted as a guiding document alongside the 2030 Agenda and the Paris Agreement. A speaker called for contextualizing the meaning of "energy transition," noting that some countries still need to build energy systems. The discussion also stressed the need for clean cooking options in Africa, and identified opportunities for intra-African trade with the commencement of the African Continental Free Trade Area.

E-mobility and energy use in buildings were discussed by many as priority sectors, especially for energy efficiency investments and deployment. Efficiency for motors was also identified as a priority area. Additional sectors highlighted include cement, steel, and chemicals.

A speaker noted that the energy transition is often thought of as a matter for private sector investment, and supported a focus on ownership, not just job creation. The value of green jobs for youth was mentioned in order to build back better with a generation that has "meaningful" jobs.

Participants stressed the need for information sharing and public awareness campaigns in both developed and developing countries. For example, one speaker suggested that renewable technologies are perceived to be more technologically challenging, which impedes their adoption. The value of public policy with clear targets, including interim targets on the road to 2030 and 2050, was also discussed.

Speakers called for incorporating energy sources such as bioenergy and hydrogen into the Working Group's recommendations. Energy storage solutions, including batteries, were also highlighted. A speaker suggested that Carbon Capture, Utilization and Storage (CCUS) be pursued during the transition away from fossil fuels.

The **second virtual meeting** took place on 15 April 2021, with the participation of 76 experts. Participants suggested that the draft report needs to better convey a sense of the opportunity presented by the transition, alongside the importance of coherence and political will to steer it to everyone's benefit. Speakers said key constituencies that must be engaged in the transition include youth, cities, and the private sector. They called for recommendations on energy efficiency to be prominent in the report, and noted a need for attention to education and training to build skills to prepare those who will be adversely affected by the transition.

Other priority recommendations included: addressing energy efficiency in building stocks; matching skills to anticipated future needs; strengthening cybersecurity for energy systems, especially as they become more distributed; and improving regional integration of energy systems. Some of these activities were noted as potential areas for energy compacts.

During the **third meeting**, on 20 May, 66 participants considered the revised draft and offered a final round of comments. The draft report addressed six areas of challenges and action:

- policy framing;
- infrastructure, including power systems and integration;
- supply, including renewable energy and other options, and finance;
- demand, energy efficiency, and finance;
- transport; and
- hard-to-abate sectors.

Speakers called attention to the report released earlier in the week by the International Energy Agency (IEA) with a roadmap to achieve net-zero emissions by 2050, and several highlighted the report's recommendation to have no new investments in fossil fuel production. Speakers noted the need to transition existing infrastructure and to address mining needs to secure the raw materials necessary for the energy transition.

On a recommendation on phasing out coal, several speakers said it should go beyond coal to call for a progressive phase out of fossil fuels. One speaker suggested calling on countries to develop plans for how they will phase out fossil fuels. Another said it would be more realistic to call for no additional coal-fired power plants rather than asking developing countries to phase out coal.

Some speakers suggested including a target on finance, while others recalled that another Technical Working Group is developing a report on financing. One speaker stressed that developing countries need global green funds and access to technology on a concessional basis.

At the conclusion of the meeting, it was noted that the process of developing the report has created a community that could help with implementing the energy transition in the coming years.

The Group's report will be launched during a Ministerial Thematic Forum on Energy Transition on 23 June 2021.

Technical Working Group on Enabling SDGs through Inclusive, Just Energy Transitions

The lead organizations for the Technical Working Group on Enabling SDGs through Inclusive, Just Energy Transitions were: the UN Department of Economic and Social Affairs (DESA), the UN Economic and Social Commission for Western Asia (UNESCWA), and the World Health Organization (WHO).

Damilola Ogunbiyi, Special Representative of the UN Secretary-General for Sustainable Energy for All, Co-Chair of UN-Energy, and Co-Chair of the High-level Dialogue on Energy, opened the **first meeting** on 25 February 2021, noting that being inclusive requires looking at challenges in a localized way.

Sixty-three participants took part in this meeting. They highlighted this Working Group's unique focus on advancing the SDGs as a whole, not only the energy agenda, and observed that advancing the energy agenda is an important strategy for achieving other SDGs. Speakers discussed whether the report should focus on linkages with specific SDGs, or broader themes such as inclusive growth, human well-being, provision of decent work and livelihoods, and planetary security. The need to address trade-offs in addition to synergies among the Goals was also mentioned.

Most participants highlighted inclusivity as a major emphasis for the report, with many suggesting that the recommendations focus on the needs of women and the poor – those who are most disadvantaged by a lack of access to energy – and ensure their inclusion. Some recommendations included building capacity for women working in the energy transition, strengthening clean cooking solutions, and ensuring that energy financing reaches the poor so people can start small businesses and ensure energy access. Speakers also noted that youth in the global South will be particularly involved in driving SDG 7.

One speaker reminded the Group that the energy transition will have winners and losers. For example, more than 50 countries will have revenue shortfalls from the falling demand for oil and gas.

The **second virtual meeting** took place on 20 April 2021, with the participation of 61 experts. Participants proposed re-examining several concepts before finalizing the report, such as: what is meant by an "inclusive" and "just" transition; the timeframe for the future vision reflected in the Group's recommendations; and how women can be incorporated as agents of change, not just beneficiaries.

One participant said financial and technical innovations are needed on the demand side, while discussion often focuses on innovations for the supply side.

On the vision reflected in the report, one speaker encouraged a longer timeframe, to 2050 and even beyond. One participant suggested recommending that countries link their nationally determined contributions under the Paris Agreement with their voluntary national reviews of national SDG implementation, and also connect to National Biodiversity Strategies and Action Plans.

During the **third meeting**, on 19 May, 43 participants considered the revised draft and offered further comments. The revised report contained six recommendations:

- Implementation of an energy transition strategy must have an explicit focus on equity and inclusiveness to enable the SDGs. In this regard, attention must be paid to enhancing prosperity, empowering people, and protecting the planet;
- Access to energy, including electricity and clean cooking, must be integrated as a central pillar of any inclusive, just energy transition strategy;
- A gender transformation must be accelerated to close the gender gap and empower women, including gender parity in employment, policy, and decision-making processes;
- The report's "Energy for SDG Impact Framework" should be integrated into an energy transition, with targets and indicators to help in designing, implementing, and monitoring just, inclusive energy transitions as an enabler of the SDGs;
- Transformational change should be enabled by promoting systemic approaches to energy transition for the achievement of the SDGs and the climate goals; and
- Global partnerships should be strengthened to support communities of practice, global advocacy, and collective action in the energy and other sectors.

Speakers expressed appreciation for the changes that had been introduced since the first draft. Many stressed the need to recognize the local context in which energy transitions must take place and the importance of addressing the costs and benefits to local populations, in addition to discussing macro-level benefits. Participants also suggested making a recommendation on gender more specific and better acknowledge the role of women as instruments of change.

A speaker called for efforts to address disruption in countries that rely on fossil fuel extraction and to ensure there is extensive stakeholder buy-in, a comprehensive communication strategy to build understanding of the need for the energy transition, and reskilling and retraining. Another speaker emphasized the need for the report to focus on the issue of equity and common but differentiated responsibilities.

The Group's report will be launched during a Ministerial Thematic Forum on Enabling SDGs through Inclusive, Just Energy Transitions on 24 June 2021.

Technical Working Group on Innovation, Technology and Data

The lead organizations for the Technical Working Group on Innovation, Technology and Data were: the Food and Agriculture Organization of the UN (FAO), the UN Human Settlements Programme (UN-Habitat), and the UN Industrial Development Organization (UNIDO).

The **first meeting** of the Technical Working Group on Innovation, Technology and Data, which took place on 2 March 2021, brought together 61 participants who discussed ways to radically change the energy system to reach net-zero emissions by 2050 while leaving no one behind. Group members grappled with diverging views on the future role of fossil fuels, and emphasized the need to inclusively build skills not only for technical work but also for leadership roles.

Some pressed for investment in research and development, suggesting that only half of the technologies needed to achieve global energy goals have been invented. One speaker said ship owners are offering USD 5 billion for research and development to achieve the shipping propulsion revolution and create technology pathways to develop zero-carbon ships.

Another speaker challenged the notion that "the technology is not there," instead highlighting challenges with distribution in Africa and elsewhere.

Speakers also differed on the place of fossil fuels in the roadmap to SDG 7 and net-zero emissions. Several proposed focusing on clean energy and renewables. Others suggested focusing on how to make oil, gas, and nuclear energy sources more efficient and environmentally friendly, and said the Group should be "technology neutral" by prioritizing lower emissions, not just renewable sources.

Forty-five experts participated in the **second meeting**, on 13 April 2021. Key messages during this discussion included: the need to use data to leverage investment in innovative technologies; a desire to focus more on energy as a service and prioritize innovations on end use; and the importance of supporting innovation in a broad sense, not only related to technology but also financial and social elements.

Participants expressed a desire for more attention on data governance, including accountability and transparency for data methodologies. They said this action should apply to measuring the success of a government's net-zero commitment. Speakers also said data are needed to ensure that new technologies are really reducing carbon emissions and helping reach the Global Goals.

During the **third meeting**, on 26 May, 44 participants gathered to provide their final comments on the draft. The revised report's five key recommendations called for:

- Strengthening governance for energy innovation at the national and local levels, and strengthening international cooperation around mission-oriented policies and strategies that are informed by evidence and science-based targets, backed by long-term predictable funding and financing to drive "homegrown" innovation, and guided by the principles of a just transition;
- Partnering with the private sector to expand the supply of clean energy innovation through targeted, sustained, outcome-based funding and research and design development and demonstration, using concrete milestones for scaled-up commercial adoption;
- Accelerating demand for clean and sustainable energy technologies and innovation through: market-oriented policies; harmonized international standards; carbon pricing mechanisms; enabling infrastructure; fiscal incentives and access to finance; regional and local green value chain development; and commitments to public and private procurement of clean energy technologies;
- Developing an inclusive and integrated enabling environment to leverage digitalization for financial and social innovation into new business models that improve affordability, reliability, and accessibility of clean energy technologies; and
- Enhancing data systems and energy planning workflows and analytics to better inform energy policies, planning and regulations, direct investment decisions, and monitoring, evaluation and reporting, to address disparities and to effectively manage synergies and trade-offs in energy access, technologies, and security among vulnerable and marginalized communities.

Speakers highlighted the need to make the report's recommendations actionable and recognize a role for existing partnerships and activities in implementation.

Participants said attention should be given to the elderly in recommendations on digitalization.

One speaker said the impact of traditional energy on ecology and the climate should not be overlooked, and called for technology development related to existing challenges such as oil spills. Discussion also noted the need to address challenges related to developing rare earth mineral-related industries.

The Group's report will be launched during a Ministerial Thematic Forum on Finance and Investment on 22 June 2021.

Technical Working Group on Finance and Investment

The lead organizations for the Technical Working Group on Finance and Investment were: the European Investment Bank (EIB), the International Energy Agency (IEA), and the UN Economic Commission for Africa (UNECA).

Opening the **first meeting** of this Technical Working Group, which took place online on 26 February 2021 and was attended by 78 participants, Damilola Ogunbiyi, Special Representative of the UN Secretary-General for Sustainable Energy for All, Co-Chair of UN-Energy, and Co-Chair of the High-level Dialogue on Energy, said energy investment must urgently switch gears to support human development and climate action.

Discussions focused on the potential of blended finance to rapidly increase support for clean energy, and elicited ways to reach more than the "low-hanging fruit" of SDG 7 through energy investments for countries and communities that need it most. Speakers also highlighted the importance of de-risking, supporting local currency investments, a stepped-up role for development finance institutions (DFIs), capitalizing on the momentum of ESG (environmental, social, and governance) investment, ensuring political stability and rule of law, and investing in transmission and distribution of power.

On blended finance, a speaker noted that the current types of capital are not "fit for purpose" to fill Africa's infrastructure needs and other gaps, but blended finance and integrating different forms of capital can help to address them. Participants said mobilizing domestic currency capital and leveraging credit enhancements could enable more private capital to flow.

A speaker noted that SDG 7 is "the one SDG that is likely to be reached by 2030," but that the poor could be left behind if new ways of using capital are not found. Speakers stressed the need to bring low-cost solar products further, reach more difficult markets, and incentivize impact.

A participant said DFIs should act more like development organizations than commercial banks and be prepared for more loss and risk. Another suggested putting "the D in DFI" and avoiding the "low-hanging fruit of low-risk investments."

Sixty-four experts participated in the **second meeting** on 14 April 2021. Key issues highlighted during the discussion of the draft report included: the importance of local capacity building and of just transition efforts; the need to identify how to make projects sellable and economically viable; the value of incorporating local currency into projects; and the need to address risk and recognize the different roles that capital can play.

The need for political will was discussed, with participants recognizing that entrenched interests exist in the fossil fuel sector as well as in utilities, and every change will affect individuals and their jobs. As a result, high-level political will and political buy-in will be necessary for successful change, they said.

A speaker emphasized the need to create incentives and show what is possible. Business models were said to be lacking, and the need to provide technical assistance to train change managers as well as substantive experts was mentioned.

Participants highlighted the importance of local currency financing for unlocking investments. The need for training and technical assistance to local financial institutions related to renewable energy projects, to help them build a track record for financing such projects, also was mentioned.

During the **third meeting**, on 25 May, 46 participants gathered to provide their final comments on the draft. Recommendations in the report included:

- Accelerate the delivery of public finance in support of sustainable energy goals;
- Regain the momentum lost on energy access investments during the COVID-19 pandemic, with a focus on closing the affordability gap, among other objectives;
- Align energy financing with all dimensions of the Paris Agreement, including by redefining eligibility criteria for each financial institution to support the energy sector, recognizing that fossil fuels must be phased out as soon as possible;
- Governments should work with relevant stakeholders to ensure that the realization of SDG 7 and the global energy transition leaves no one behind, with a particular focus on clean cooking, empowering women and youth, and mitigating the impacts on communities that will face disruptions;
- Enhance local currency funding and support for deepening domestic capital markets to achieve SDG 7;
- Make better use of blended finance schemes to mobilize and maximize private capital for clean energy investments and innovative energy technologies;
- Correct market-distorting subsidies and address the lack of carbon pricing frameworks and inadequate accounting of environmental externalities that hold back sustainable investment;
- De-risk projects and fix regulatory barriers to ensure market openness, attractiveness, and readiness for private sector finance; and
- Develop new mechanisms to link sustainable finance with opportunities to support SDG 7 and reward ambitious energy transition strategies.

Group members asked for the recommendations to be more specific. They also suggested clarifying references to: de-risking investments; avoiding investments in fossil fuels; and setting carbon prices.

On the recommendation to de-risk clean energy projects, a speaker cautioned against the perception that investment will only come if there are zero risks or if the government absorbs all risk. This speaker highlighted that the private sector is used to taking risks. Another speaker similarly suggested allocating risk to the party best able to manage it.

A speaker questioned the recommendation on carbon pricing frameworks, suggesting that the report directly call for a "global" price on carbon. Another noted that while a global price on carbon could help move the world towards a low-carbon future, it may not be politically feasible. Participants noted challenges with increasing consumer prices for energy as the world recovers from COVID-19. A speaker said regulatory measures that implicitly recognize environmental externalities, such as efficiency measures and auction schemes, can address these challenges.

The Group's report will be launched during a Ministerial Thematic Forum on Finance and Investment on 25 June 2021.

A Brief Analysis of the Technical Working Groups

"If you want to go fast, go alone. If you want to go far, go together."

This proverb is often invoked in UN discussions. While overuse makes proverbs lose their edge, the Technical Working Groups could be viewed as having provided data points to illustrate the

concepts behind it. We organize these data points according to three outcomes expected from the High-level Dialogue on Energy itself: a global roadmap; a network of actors; and a set of voluntary energy compacts.

A Global Roadmap

The Technical Working Groups began in February 2021 with the objective of crafting a roadmap for achieving globally agreed goals for 2030 and 2050. The timeline to produce the roadmap was short – approximately 100 days. Although the work took place at the technical working level, it was an inclusive, multi-stakeholder process conducted with the involvement of governments and organizations from around the world. For example, one co-lead estimated the number of contributors to the Technical Working Group on Energy Access at 400 individuals. The contrasting dynamics from the short timeline and the need for outcomes that all UN Member States would be able to sign onto were clear in the final round of discussions on the reports.

The release of the IEA's report on "Net Zero by 2050" prior to the third round of the Technical Working Groups illustrated the proverb in real time. The IEA report was developed at the request of the UK government in preparation for COP 26, but it fed into the High-level Dialogue on Energy as well. It identified 400 recommended actions, beginning with stopping investing in fossil fuels immediately.

The juxtaposition of this report, which sets out best practices and guidance for what must happen to achieve net zero by 2050, with the reports and discussions under the High-level Dialogue on Energy will be instructive. The debates in the ministerial forums and Dialogue itself will show us where the global consensus – or lowest common denominator – stands. These positions can be held up against the IEA report, to show where the gap in ambition remains. As the High-level Dialogue on Energy process moves from a Chatham House rules discussion to a format in which the variety of actors can be clearly associated with their level of ambition, the pressure to demonstrate solidarity will come into conflict with those countries who what to sprint ahead.

A Network of Actors

During the final round of the Technical Working Group discussions, many speakers referred to one outcome from the preparatory process as being the development of a stronger network of actors working on the energy transition. They highlighted the value of their work with the co-leads, country champions, and Technical Working Group members as an additional outcome from the Dialogue preparatory process.

The report drafting process required participants to reach across traditional organizational boundaries and to develop new connections. A network requires feeding and care, and the Technical Working Group process has taken the first step to ensure the network will thrive.

In order to move together, it will take more than countries coming up with a shared statement. Partnerships among international organizations, countries, and civil society will also be required. Although everyone in the Technical Working Groups is working on "energy," differences remain in their organization's focus, and sectoral silos and other impediments to collaboration still exist. One participant expressed hope that the process of developing the report has created a community of practice that would remain connected in the coming years.

Voluntary Energy Compacts

Ultimately, the action that the High-level Dialogue on Energy inspires on the ground will be its real measure of success. The heft behind UN events such as the Dialogue is generally the power of persuasion. The outcome documents are advisory and not obligatory. This has led organizers to pair such events with announcements of voluntary commitments by participating governments and others. For example, at the UN Conference on Sustainable Development, in June 2012, participants were encouraged to make voluntary commitments for actions to implement the conference's goals, and almost 700 had been received by the close of the Conference.

The Secretariat of the High-level Dialogue on Energy has undertaken a process to foster and encourage such commitments in the form of energy compacts. The Secretariat is not simply building a website repository where the commitments will be listed, but organizing discussions led by "champions" to galvanize a variety of actors and sectors within the energy community. It is also holding numerous workshops to provide tailored suggestions for what such compacts might look like for various circumstances and stakeholders.

Some Technical Working Groups' discussions pushed for the reports to contain specific examples of actions to achieve global energy goals. Where a report that must make political compromises may not be able to meet this standard, voluntary compacts were pointed to as a way in which specific actions that need to be taken could be documented to collectively build momentum.

The Ministerial Forums will be the first opportunity to raise the visibility of the energy compacts to which the Technical Working Group process contributed. These opportunities will continue until the High-level Dialogue on Energy in September. Following the Dialogue, the focus will be on monitoring and reporting and implementing the energy compacts.

The compacts are designed to be the engines through which a coalition of the willing can help to power to the collective whole to an ambitious and just energy transition. Our team will be watching for those actors who are striking out on their own, and the overall effort to make this once-in-a-generation dialogue as consequential as possible.

Upcoming Meetings

Ministerial Thematic Forums: Ministers and leaders from business, cities, civil society, youth organizations, and other stakeholders will address the five themes selected for the High-level Dialogue on Energy, as follows: Energy Access (21 June); Innovation, Technology and Data (22 June); Energy Transitions (23 June); Enabling SDGs through Inclusive, Just Energy Transitions (24 June); and Finance and Investment (25 June). **dates:** 21-25 June 2021 **location:** online **www:** https://www.un.org/en/conferences/energy2021

High-Level Political Forum on Sustainable Development 2021: The ninth session of the HLPF will take place over eight days in July 2021 under the following theme: "Sustainable and resilient recovery from the COVID-19 pandemic, that promotes the economic, social, and environmental dimensions of sustainable development: Building an inclusive and effective path for the achievement of the 2030 Agenda in the context of the decade of action and delivery for sustainable development." **dates:** 6-15 July 2021 **location:** online **www:** https://sustainabledevelopment.un.org/hlpf/2021

High-level Dialogue on Energy: The Dialogue will convene at the summit level. The event will take place one day in September, and will be convened by the UN Secretary-General. **dates:** September 2021 (TBD) **location:** online **www:** https://www.un.org/en/conferences/energy2021

For additional upcoming events, see http://sdg.iisd.org/