

**Economic and Social Commission for Asia and the Pacific**
Committee on Energy**Third session**

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Item 3 (c) of the provisional agenda*

Follow-up on the Ministerial Declaration on Regional Cooperation for Energy Transition towards Sustainable and Resilient Societies in Asia and the Pacific of the Second Asian and Pacific Energy Forum: regional road map on power system connectivity, entitled “Promoting cross-border electricity connectivity for sustainable development”**Regional road map on power system connectivity:
promoting cross-border electricity connectivity for
sustainable development****Note by the secretariat***Summary*

The present document contains the final draft regional road map entitled “Regional road map on power system connectivity: promoting cross-border electricity connectivity for sustainable development”. It is intended to provide a reference for regional cooperation towards achieving power grid integration over the period 2020 to 2035.

The draft regional road map was developed through a comprehensive process involving the Expert Working Group on Energy Connectivity and was presented to the Committee on Energy at its second session, in October 2019. The final draft road map contained in the present document reflects additional revisions made following further review during the preparatory meeting of the Expert Working Group on Energy Connectivity in June 2020 as well as during the informal consultation in November 2020 and the 4th meeting of the Expert Working Group in December 2020. It also reflects comments received from member States as of September 2020.

In decision 76/9 of the Economic and Social Commission for Asia and the Pacific, as contained in document E/2020/39-ESCAP/76/35, it requested the Committee to review the road map with a view to providing guidance on the follow-up, as appropriate. The Committee may wish to endorse the final road map and to provide guidance on power system connectivity and sustainable energy development for the future work of the Committee and the secretariat.

* ESCAP/CE/2021/L.1.

1. The Committee on Energy, at its first session, in 2017, recognized the importance of energy connectivity in achieving sustainable development and, in particular, the potential benefits of transboundary power trade as a tool for increasing the sustainability of the power sector. The Committee also recognized the need to provide further clarity for the development of strategies and a road map identifying concrete steps to promote regional energy connectivity through expert-level discussion and consideration and intergovernmental processes with the support of the secretariat (E/ESCAP/73/30).

2. Also in 2017, the ministers attending the Fourth Asia-Pacific Forum on Sustainable Development adopted the regional road map for implementing the 2030 Agenda for Sustainable Development in Asia and the Pacific. Section B.2 (f) of the regional road map for implementing the 2030 Agenda is focused on energy, including the following opportunities for regional cooperation: (a) support the work of the Asian and Pacific Energy Forum and other regional mandates as well as the targets of Sustainable Development Goal 7; and (b) promote policy dialogues and networking among member States to develop a regional cooperation framework to enhance energy security, with a view to promoting greater use of sustainable energy resources, including universal access to affordable, reliable, sustainable and modern energy for all, energy services, energy efficiency, advanced and cleaner fossil fuel technologies and renewable energy as well as energy connectivity, in particular transboundary power trade (E/ESCAP/73/31, annex II).

3. The importance of energy connectivity and the potential contribution of cross-border energy trade in attaining Sustainable Development Goal 7 was also recognized at the Second Asian and Pacific Energy Forum. The Forum stressed the necessity of common efforts to facilitate the development and implementation of regional energy connectivity and energy trade in Asia and the Pacific. Efficient, reliable and resilient electricity infrastructure plays an important role in stimulating regional economic growth and development. The Forum sought further regional cooperation to improve energy connectivity (ESCAP/74/27/Add.1).

4. In response, the secretariat developed four reports on the status and challenges of connectivity in different ESCAP subregions. These reports were presented to the Expert Working Group on Energy Connectivity at its 2nd and 3rd meetings, which were chaired by China. Experts identified by member States used the reports as inputs to support the development of the initial draft entitled “Regional road map on power system connectivity: promoting cross-border electricity connectivity for sustainable development”.

5. The draft regional road map was submitted to the Committee on Energy at its second session, in 2019. The Committee welcomed the work of the Expert Working Group on Energy Connectivity and the draft regional road map and invited member States to submit comments on the draft road map before 1 December 2019. The Committee recommended that the Expert Working Group review comments on the draft road map, if any, and finalize it for the consideration by the Commission at its seventy-sixth session (ESCAP/76/6).

6. The draft incorporating comments from member States was submitted to the Commission at its seventy-sixth session for its consideration. The Commission, in an abbreviated session, adopted decision 76/9, in which it took note of the draft road map entitled “Regional road map on power system connectivity: promoting cross-border electricity connectivity for sustainable development” contained in document ESCAP/76/15 and requested the

Committee, at its third session, to review the draft road map with a view to providing guidance on the follow-up, as appropriate (E/2020/39-ESCAP/76/35).

7. The draft road map was submitted to the member States for their additional consideration and comment, and the secretariat organized an informal consultation on the draft road map on 17 and 18 November 2020. Member States proposed numerous changes and made comments on the draft, all of which were reviewed and cleared by the representatives attending the informal consultation and are reflected in draft road map annexed to the present document.

8. The Committee may wish to review and endorse the draft road map annexed hereto for submission to the Commission at its seventy-seventh session.

Annex

Final draft

Regional road map on power system connectivity: promoting cross-border electricity connectivity for sustainable development

I. Background

1. The Economic and Social Commission for Asia and the Pacific (ESCAP) is promoting energy connectivity through regional cooperation. The regional draft road map on power system connectivity, entitled “Promoting cross-border electricity connectivity for sustainable development”, is intended to provide a reference for regional cooperation towards achieving power grid integration over the period 2020 to 2035.

2. Enhancing regional energy connectivity with a focus on power grids is an important means of enhancing the sustainability and security of the region’s energy supply. It can help countries to manage electricity surpluses and deficits in a mutually beneficial way and open up opportunities for integrating the large-scale development of renewables. This not only supports economic growth but also provides member States with greater opportunities to formulate more ambitious emission reduction strategies under the Paris Agreement¹ and to combat air pollution. Internationally, there is a growing focus on enhancing power grid connectivity to address multiple objectives, including power system reliability, cost-effectiveness, security, as well as sustainability. There are many successful examples of power system integration in other regions of the world which provide useful reference points and guidance for the region.

3. In 2017, the Commission adopted a resolution in which it established an Expert Working Group on Energy Connectivity. At the first meeting of the Expert Working Group, held in Bangkok in December 2017, members proposed developing a regional draft road map on energy connectivity. Following this, the region’s energy ministers, through the Ministerial Declaration on Regional Cooperation for Energy Transition towards Sustainable and Resilient Societies in Asia and the Pacific of the Second Asian and Pacific Energy Forum, held in 2018, decided to support the work of the Expert Working Group. Following the mandate provided in the Ministerial Declaration, ESCAP initiated four subregional status reports on energy connectivity covering the following subregions: South-East Asia; South and South-West Asia; North and Central Asia; and East and North-East Asia. These reports provided an overall analysis for the implementation of energy connectivity in the Asia-Pacific region. In the reports, ESCAP provided a review of the role of interconnectivity in each subregion and its potential benefits for sustainable development while looking at challenges to further cross-border power interconnectivity. It also highlighted steps that each subregion needs to take in order to establish the policy, regulatory and institutional arrangements needed to integrate the power grids of the four subregions and the wider Asia-Pacific region.

4. The regional draft road map on power system connectivity is based on the status reports developed by experts for the four subregions and the deliberations of the Expert Working Group on Energy Connectivity. The third meeting of the Expert Working Group was convened in Bangkok on 29 August

¹ Turkey has not ratified the Paris Agreement yet.

2019 to review the draft regional road map. Experts provided detailed feedback on the proposed strategies, drawing on subregional and national perspectives. The Committee on Energy at its second session, in October 2019 welcomed the draft regional road map.

5. The draft road map contained in the present document reflects additional revisions made following further review and on the basis of comments received from member States until December 2019.

II. Regional draft road map on power system connectivity: promoting cross-border electricity connectivity for sustainable development

A. Vision and principles

6. The overall objective of the draft road map is to provide the member States with a possible framework for moving towards a more interconnected grid that offers a more reliable, affordable and sustainable electricity supply. This would underpin the region's social and economic development and assist the member States to transition to more efficient, flexible, economical and lower greenhouse gas emissions energy systems.

7. The potential for enhanced power grid connectivity and cross-border electricity trade in the Asia-Pacific region is significant. Member States and subregions can capitalize on complementing themselves in terms of energy demand and energy resource availability, and power infrastructure development. This requires an evolutionary process, moving from the bilateral exchange of electricity to multilateral trade within an overarching bilateral framework and eventually the creation of an integrated power market. Achieving power grid connectivity can enhance the availability and affordability of electricity and accelerate the utilization of renewables. It therefore contributes to achieving Sustainable Development Goal 7 and the other Goals.

8. The draft road map reflects an acknowledgement that energy policy is affected by the circumstances of each country and subregion, and discretion is therefore left to each country. The draft road map is intended as a non-binding reference framework. Careful consideration should be given to the respective circumstances of countries during its implementation.

9. Many countries in the region are archipelagic, presenting major challenges to power grid integration. However, in these areas, where fuel is often transported to service power needs, connectivity can offer great benefits. It is important to understand these unique issues and to seek the best policies, regulations and business models to address power grid connectivity in these circumstances.

B. Building blocks

Regional framework

10. The realization of a vision of an interconnected regional power system requires the development of a regional framework and appropriate institutions to support and coordinate the system. By building upon and providing impetus for existing subregional initiatives, the draft road map is intended to enable coordination among various institutions and to progressively remove barriers to energy interconnection.

Institutional arrangements

11. Because the electricity sector is highly regulated, the process of integrating national power grids requires enhanced regional energy cooperation between the Member States, with support from regional and subregional institutions, as well as promotion of the development of a regional institutional framework that can facilitate the process. The experience from other subregions has underscored the facilitating role that these institutions play in the integration process.

C. Strategies

12. The draft road map proposes nine strategies for regional stakeholders to address and suggests ways and means for realizing each strategy. The time frames for each strategy are defined as short term (1 to 3 years), medium term (4 to 7 years) and long term (7 to 15 years).

Strategy 1: build trust and political consensus for cross-border electricity trade

13. Geopolitical issues and lack of trust among many of the countries in Asia and the Pacific are major challenges for enhancing connectivity and establishing cross-border electricity trade. Overcoming them requires a process of continuous trust-building, which must be supported by independent intergovernmental organizations such as ESCAP, subregional cooperation organizations and multilateral banks. There is a need to build consensus among member States for the long-term vision of energy connectivity in the Asia-Pacific region and to overcome the principal barriers to energy connectivity.

14. To create trust and to promote political consensus, it is important to promote continuous dialogue among the decision makers and stakeholders of member States in each subregion. The Commission and subregional intergovernmental institutions, such as the Association of Southeast Asian Nations (ASEAN), the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation, the Eurasian Economic Union, the Greater Mekong Subregion Economic Cooperation Programme, the Greater Tumen Initiative, the Lancang-Mekong Cooperation, the South Asian Association for Regional Cooperation (SAARC) and the Shanghai Cooperation Organization, can play a vital role in building trust and political consensus by utilizing their platforms to convene stakeholders such as policymakers, decision makers, think tanks, regulators, financing organizations and private developers. To achieve progress on this strategy, these intergovernmental institutions need to develop coordinated action plans on power grid connectivity and facilitating export or import of electricity within a mutually agreed framework.

15. Building trust for cross-border energy connectivity should also be pursued with countries regardless of whether they are export, import or transit countries. This process is needed to promote the understanding of benefits among different sectors of society and ensure support for the interconnection process.

16. The Commission can play an important role in building trust and political consensus with the objective of enhancing grid connectivity in the Asia-Pacific region by organizing focused regional meetings, which may be held in conjunction with sessions of the Committee on Energy, Furthermore, multilateral institutions, as well as specialized institutions working in the

various subregions, also could coordinate their activities with ESCAP and those of subregional intergovernmental institutions to maximize impact.

Key milestones

A regional meeting on grid integration convened regularly from 2021 onwards.

Time frame

Short-, medium- and long-term.

Key implementers

Member States, with support from the secretariat, subregional organizations, intergovernmental institutions, multilateral development banks and other relevant international organizations.

Strategy 2: develop a regional cross-border electricity grid master plan

17. Today, grid interconnectivity in the Asia-Pacific region operates on a bilateral basis and is limited in its extent. To promote connectivity for the broader region, it is important to discuss and develop a grid master plan for the interconnection of the region's power grids. The development of a grid master plan should adhere to the principles of energy security, grid stability, economic feasibility and inclusiveness, by reflecting the concerns and demands of relevant stakeholders. It will not be a legally binding document; rather, it will be voluntary in nature and will take into account each country's energy policy and power system.

18. To support this, there should be greater networking of subregional intergovernmental institutions, including multilateral institutions. This will enable member States to identify and enhance the economic, social and environmental benefits of cross-border electricity trade and agree on the architecture of a regional cross-border grid. Member States may then agree upon implementation of power system connectivity in a phased manner through bilateral or subregional cooperation.

19. Taking into account that the Asia-Pacific region also consists of many archipelagic countries where power grid integration is a big challenge, addressing security of supply and connectivity for the region is of the utmost necessity. Power exchange is considered the most effective way to ensure energy as opposed to fuel transport. It is important to seek the best policies, regulations and business models to address power grid connectivity in this particular region.

Key milestones

Regional grid master plan might be agreed by member States by 2025 and mapping of the region's existing high voltage transmission network by 2022.

Time frame

Medium-term.

Key implementers

Member States, with support from the secretariat and subregional institutions.

Strategy 3: develop and implement intergovernmental agreements on energy cooperation and interconnection

20. Political commitment in the form of various treaties, agreements or memorandums of understanding among the member States in each subregion is important for enhancing energy connectivity. International examples of successful power pools highlight the importance of agreements signed by the participating countries to signal each country's political commitment to promoting energy cooperation and integration within a specific time frame.

21. In North-East Asia, there is no intergovernmental institution or existing agreement signed by the member States on interconnection. The current trade is limited and based on bilateral agreements. In ASEAN, SAARC and the Greater Mekong Subregion Economic Cooperation Programme, member countries are following strategic processes, such as signing agreements on energy cooperation and grid connectivity and constituting ministerial committees and working groups to promote energy cooperation and integration. The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation countries have also recently signed an agreement on grid interconnection.

22. Where agreements are already in place, it is important that member countries ratify and expedite their implementation. For other regions it is important to learn from the experiences of ASEAN, SAARC, the Greater Mekong Subregion Economic Cooperation Programme and other successful power pools in the world, and to enhance collaboration with these institutions. This will help in adopting a strategic approach to enhance energy cooperation and connectivity in the subregions.

23. Other subregional institutions may be invited to integrate to support power grid interconnection.

24. For North-East Asia, the subregional countries may aspire to and initiate further enhancement of energy interconnectivity by providing a platform for discussing the development of grid integration mechanisms.

25. The Commission, in cooperation with member States, intergovernmental institutions and multilateral development institutions may, if requested, support member States in developing possible grid connectivity integration agreements to enhance energy connectivity in the region.

Key milestones

At least one intra-subregional high-level meeting on energy connectivity held on the initiative of member States in cooperation with ESCAP by 2022 and at least one additional grid interconnection agreement in place for all subregions by 2025.

Time frame

Short- and medium-term.

Key implementers

Member States, with support from the secretariat and subregional organizations.

Strategy 4: coordinate, harmonize and institutionalize policy and regulatory frameworks

26. Policies, regulations and standards for power grids may differ among countries in each subregion. As the electricity sector is highly regulated and grid stability is a critical priority, aligning policies, regulations and standards with respect to cross-border electricity trade is essential.

27. Moreover, efforts need to be made to develop frameworks for aligning policies, regulations and standards in support of cross-border electricity trade.

28. Regulators in each subregion, with the support of intergovernmental institutions and/or multilateral institutions, could establish forums or associations of national regulators in each subregion to enable the harmonization of regulations, capacity-building and knowledge-sharing.

29. Forums or associations of regulators in subregions where these have not already been formed can also facilitate the development of a common set of regulations for cross-border electricity trade such as on licensing, open access, the harmonization of grid codes and the establishment of subregional transmission pricing frameworks that could eventually cover the entire region.

Key milestones

Analysis of gaps in grid policies, regulations and standards in each subregion by 2023 and subregional associations of national regulators formed by 2025.

Time frame

Short- and medium-term.

Key implementers

Member States, with support from the secretariat and subregional organizations.

Strategy 5: move towards multilateral power trade and create competitive markets for cross-border electricity

30. Transitioning from bilateral to multilateral electricity trade is a challenge in the Asia-Pacific region. Existing cross-border electricity trade remains limited and is conducted on a bilateral basis. Moving to a multilateral mode can help countries to optimize overall regional energy resources, enhance economic growth, expand the use of renewables, strengthen reliability, and enable reserve sharing to cater to contingencies as well as balance supply for power integration, facilitate utilization of time diversity in occurrence of peak demand, lower costs and increase the efficiency of the power sector. It is important to continue in-depth analysis of bilateral power grid connectivity as well as of the advisability of the establishment of a multilateral system, taking into consideration the overall framework of bilateral agreements signed between different countries.

31. Gradual progress towards transparent, fair, competitive and balanced electricity markets with fair pricing mechanisms is an important element of regional power connectivity. Market integration can take advantage of diversity among countries, enhance competitiveness and reduce costs for consumers. In other regions, experiences with cross-border electricity markets have been positive, but they highlight the need for institutional frameworks.

With each country having its own tariff pricing mechanism and differing commercial agreements and payment security mechanisms, a secured payment mechanism is critical for enhancing trade of electricity across borders.

32. The development of feasible power purchase agreement templates, transmission service agreements and payment security mechanisms acceptable to member States would be an important enabling step for electricity trade. Furthermore, implementing transparent and attractive transit fee frameworks in all the member States, in accordance with national circumstances will help to expedite cross-border interconnection and trade.

33. The forums of subregional regulators could initiate the dialogue on the development of contractual document templates such as power purchase agreements, transmission service agreements, transit fee frameworks, subregional pricing frameworks, payment security mechanisms, competitive bidding and market rules for electricity trade on power exchanges. The experiences of international power pools also highlight the importance of comprehensive, well-drafted standard contracts that fully incorporate the consequences of contractual defaults and emergency events.

34. Intergovernmental and multilateral institutions working in the subregions should make concerted efforts with governments, regulators and decision-makers to promote moving towards multilateral cross-border electricity trade and the development of competitive markets for cross-border electricity keeping in mind the policy framework of respective governments in this regard.

35. The economic, social and environmental benefits of the electricity trade and relevant international experiences, including regional examples, could be shared with relevant stakeholders, including national policymakers, to build the case for multilateral electricity trade.

Key milestones

Development of subregional and Asia-Pacific studies to evaluate the economic, energy security, social and environmental aspects of multilateral electricity trade.

Time frame

Medium- and long-term.

Key implementers

Member States, with support from the secretariat and subregional organizations.

Strategy 6: coordinate cross-border transmission planning and system operation

36. Wheeling of electricity across different national grid networks requires transmission systems to be physically interconnected. To interconnect two separate national power systems, it is important to harmonize grid codes encompassing frequency, voltage and thermal limits. Furthermore, metering connection, protection schemes, transmission planning and scheduling need to be coordinated among the technical institutions and power utilities of member States in each subregion for the safe and reliable flow of electricity.

37. To encourage the development of cross-border power generation projects, power utilities could plan and develop adequate electricity transmission infrastructure to allow open access for developers to transmit power.

38. System operators, transmission utilities and technical institutions in each country, with the support of ESCAP, subregional institutions, Governments and multilateral institutions, can create coordinated mechanisms in each subregion for transmission planning and operation of the interconnected system. It is important that national transmission plans and cross-border transmission plans be compatible with one other.

39. These bodies, as mentioned in paragraph 38, can facilitate the harmonization of grid codes and technical regulations, grid master plans, protection schemes and scheduling, along with feasibility studies for the smooth interconnection of power systems in each subregion, in accordance with priorities and policies of member States.

Key milestones

Establishment of coordinated mechanisms for cooperation among system operation and transmission utilities.

Time frame

Medium-term.

Key implementers

Member States, with support from the secretariat, subregional organizations, multilateral development banks and specialized institutions.

Strategy 7: mobilize investment in cross-border grid and generation infrastructure

40. As the power sector is capital intensive and associated with large risks and long gestation periods, mobilizing investment is a challenge. Funding for cross-border power projects has largely been done through international financial institutions, multilateral development banks and national contributions. Considering the scale of investment required for power grid integration projects, there is a need to develop innovative financial instruments and mechanisms in each subregion to mobilize financing and reduce financing costs.

41. To attract investment, it is important that investment-friendly policies, guidelines and frameworks be in place. These include the removal of barriers to investment, smooth land-acquisition, resettlement and relocation processes, and planning clearances. These policies, guidelines and frameworks could be developed in each subregion to attract developers and investors to finance the infrastructure underpinning interconnection.

42. To lower risk and facilitate investment, it is necessary to have strong, swift and clearly defined dispute-resolution procedures to support electricity trade agreements. Presently, sellers and purchasers involved in cross-border trade need to resolve their disputes based on the power purchase agreements. Apart from amicable settlement, these dispute resolution procedures also provide for arbitration in a third country. Subregional institutions and other Intergovernmental forums, governments, regulators and appellate tribunals

could develop transparent, efficient and effective dispute-resolution mechanisms and frameworks for resolving any disputes related to cross-border electricity trade in each subregion. In South Asia, the SAARC Arbitration Council has been formed to resolve any disputes between the member countries, instead of resolving disputes in a third country.

43. Uncertain taxes and duties also deter investment. In Asia and the Pacific, currency is very volatile, which presents a challenge for developers who wish to invest in cross-border power projects and associated transmission infrastructure.

44. To encourage investment, ESCAP, in association with other intergovernmental institutions, could organize focused group meetings, workshops and conferences, inviting representatives from various financial institutions and governments, private and public developers, and policymakers to discuss investment-related issues and address barriers to investment in the power sector.

45. The financial sector can make a contribution in its own right to efforts to unlock finance and design for prudent and efficient risk allocation. It is proposed to create associations of financial institutions, multilateral institutions, representatives of the chambers of commerce of member countries, multilateral financial institutions and think tanks in each subregion to help policymakers of member countries to develop investor-friendly policies and frameworks to encourage private investment. These bodies may facilitate the development of transparent policies and regulations on taxes and duties and adopt a common approach acceptable to all member countries to encourage developers to invest in the sector.

46. These forums or associations can also facilitate research studies on issues such as financing instruments for renewable energy, developing capital markets, developing cross-border links and assessing energy investment risks. The forums or associations can facilitate the tapping of funds at competitive rates from ADB, the Asian Infrastructure Investment Bank, the New Development Bank or the World Bank for cross-border generation and energy connectivity infrastructure projects.

47. New instruments such as green bonds, blended financing or renewable energy certificates can be tailored to finance specific cross-border projects.

Key milestones

Subregional platforms, convening financial institutions, utilities and governments, created to advance financing of power system connectivity projects.

Time frame

Medium- and long-term.

Key implementers

Member States, with support from the secretariat, subregional organizations, multilateral development banks and specialized institutions.

Strategy 8: build capacities and share information, data, lessons learned and best practices

48. The Asia-Pacific region has a wealth of knowledge and experience in the energy and power sector. Some of the intergovernmental institutions have data and information on the power sector of member countries in their subregions, but the data are often not adequate and not updated regularly. In some countries, Governments are maintaining some power sector data in the public domain, whereas other countries lack public data on the power sector. Furthermore, the subregions engage in limited sharing of data, information, lessons learned, best practices and new technologies.

49. Some countries in Asia and the Pacific have successfully implemented projects on smart grids, energy efficiency, and new energy technologies, but they engage in limited sharing of best practices and capacity-building. If the power sector is to grow and integrate more effectively across the region, it is important that there will be increased sharing of information, data, lessons learned and best practices through capacity-building programmes among the member countries.

50. Intergovernmental institutions in each subregion and ESCAP could work together to develop and maintain relevant data and information, lessons learned and best practices. Intergovernmental institutions can develop and maintain data for their subregions, whereas ESCAP can cover the wider Asia-Pacific region. The existing Asia Pacific Energy Portal, operated by ESCAP, can be reinforced for this purpose.

51. Intergovernmental institutions, Governments, power utilities and multilateral financial institutions can develop plans for capacity-building to share information and expertise in areas such as new technologies, energy efficiency, smart grids, system operation, electricity markets and others.

Key milestones

Capacity-building, knowledge generation and data support plans developed and resources identified to support member States.

Time frame

Short-, medium- and long-term.

Key implementers

The secretariat, with support from member States, subregional organizations, multilateral development banks, universities, research institutes and specialized institutions.

Strategy 9: ensure the coherence of energy connectivity initiatives and the Sustainable Development Goals

52. Besides generating economic gain, enhanced energy connectivity can lead to many other positive externalities related to sustainable development, such as reducing greenhouse gas emissions, improving energy accessibility in remote areas and creating jobs. To ensure a strong synergy between energy connectivity projects and sustainable development, more focused attention could be placed on the social and environmental influences of these projects over the long term. Proactive and consistent measures countering social dislocation, biodiversity loss and climate change impacts should be taken.

53. The Sustainable Development Goals provide an agreed framework for countries to pursue national development that measures progress in social, economic and environmental terms. Developments in cross-border energy connectivity can offer more comprehensive benefits if they are aligned with the Sustainable Development Goals in the planning, implementation and operational phases.

54. Interconnection proposals, if pursued, should be developed in accordance with national circumstances and priorities in an inclusive manner that meets economic and system security criteria and ensures a positive overall societal impact and environmental protection. The Commission can support its member States in their efforts to follow these principles and develop cross-border connectivity initiatives in a manner that supports the Sustainable Development Goals, through its intergovernmental work and its research and analytical capacity.

Key milestones

A set of principles to enable the assessment of interconnection projects against economic outcomes, efficiency and sustainability criteria and to ensure coherence with the Sustainable Development Goals agreed by member States by 2023.

Time frame

Short-, medium- and long-term.

Key implementers

Member States, with support from the secretariat, subregional organizations, multilateral development banks, universities and research institutes.

III. Issues for consideration by the Commission

55. The Commission may wish to review and take a decision, as appropriate, on the regional draft road map on power system connectivity. The Commission may also wish to provide guidance on power system connectivity and sustainable energy development for the future work of the Committee on Energy and the secretariat.
