

REVIEW

FOR PARLIAMENTARIANS

A PERIODIC BRIEF ON RENEWABLE ENERGY

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INSIGHTS FROM THE FOURTH IRENA LEGISLATORS FORUM

The fourth IRENA Legislators Forum gathered parliamentarians from over 30 countries to discuss challenges and opportunities in the renewable energy sector. The meeting took place in Abu Dhabi on 10 January in conjunction with the Ninth Assembly of the International Renewable Energy Agency (IRENA).

Parliamentarians taking part were welcomed by IRENA's Director-General Adnan Z. Amin, as well as Gabriela Cuevas-Barron, President of the Inter-Parliamentary Union (IPU) and Senator from Mexico, Claude Turmes, Minister of Energy of Luxembourg and former member of the European Parliament, and Thani Ahmed Al Zeyoudi, Minister of Climate Change and Environment of the United Arab Emirates.



Amid recent progress reviews on Sustainable Development Goals (SDGs) by the UN High-Level Political Forum, the discussion examined the role of parliamentarians in implementing SDG7 on energy. The discussion then turned to bridging the energy access gap in Africa. Participants were invited to attend IRENA's Africa Ministerial meeting. The day concluded with a Public-Private Dialogue between government representatives, legislators and members of the IRENA Coalition for Action, an international network of over 80 leading renewable energy players including private sector companies, industry associations, civil society, research institutes and intergovernmental organisations.

[\[Agenda of the 2019 IRENA Legislators Forum\]](#) [\[Newsroom article\]](#)

WHY PARLIAMENTARIANS MATTER

Parliamentarians are central to taking the global 2030 Agenda for Sustainable Development forward, Adnan Z. Amin told the fourth IRENA Legislators Forum as he neared the completion of his second term as IRENA's Director-General.

As prominent representatives and legislators, they can foster, at national and regional levels, the enabling environment to boost innovation and mobilise investments in renewables; set targets and design long-term development strategies; ensure adequate budget allocations; raise awareness and bolster public support; and above all, facilitate an energy transformation that is socially just, he said.

Mr. Amin cited falling technology costs, record-high renewable capacity addition worldwide, the growing importance of standalone and mini-grid systems in ensuring new electricity access, and concrete examples of power systems operating with high shares of renewables, as instrumental drivers of the accelerating global energy transformation. Yet such progress is merely the beginning. Rapid and sustained deployment growth is needed to achieve the targets set by the 2030 Agenda while tackling climate change, he added.

The UAE Minister of Climate Change and Environment, Thani Ahmed Al Zeyoudi, highlighted the need to create policy frameworks, build up institutional capacity and encourage public-private partnerships. "Legislators can play a significant role in supporting the advancements and fast-track the deployment of renewable energy technology", Dr. Al Zeyoudi said.



Thani Ahmed Al Zeyoudi, Minister of Climate Change and Environment, UAE, Adnan Z. Amin, Director-General, IRENA, Gabriela Cuevas-Barron, President, IPU, and Senator, Mexico

Inter-Parliamentary Union (IPU) President Gabriela Cuevas-Barron highlighted the duty of parliamentarians worldwide to transpose the Paris Agreement into national legislation, with concrete projects, adequate budgets and fiscal and tax incentives. "Forty-six thousand members of parliament carry a great deal of weight", said Ms. Cuevas-Barron, who is also a Senator in Mexico.

Challenging the myth that sustainable development may come at the cost of economic rationale, she underlined the interlinkage between SDG7 and economic growth and job creation. The economic case for accelerated deployment is further crystallised, given that meeting the goal for universal energy access by 2030 requires current efforts to be doubled, she said.

Echoing this view was Luxembourg's Minister of Energy and former member of the European Parliament Claude Turmes, who called for the acceleration of renewable energy deployment. "It is no more about having 20, 30, 40 percent renewables..., [but] 100 percent renewables as soon as possible," he said.

Global conferences need to be backed by parliamentary action, he affirmed, and greater attention has to be paid to the creation of flexible market systems and increase of capital spread, particularly in regions that are naturally conducive to renewable energy use such as Africa. Mr. Turmes acknowledged the importance of establishing a social angle to drive the energy transition and providing a viable solution to those who now depend on the coal industry for employment.

SOCIAL BENEFITS OF THE ENERGY TRANSFORMATION

SOME FACTS AND FIGURES

- » **Renewable energy benefits have a ripple effect throughout society, improving public health, security, creating jobs, boosting GDP and improving balance of trade. It can also bolster water and food security;**
- » **Around 20% of the decarbonisation options identified are economically viable without consideration of welfare benefits. The remaining 80% are economically viable if these benefits are considered.**

The socio-economic dimension of the energy transformation is an important consideration that relies on a holistic approach to policymaking. As with any large-scale transition, implementing SDG7 would involve some level of disruption within the current system – driving the energy transformation from a social angle, therefore, is of prime importance, stressed Claude Turmes.

In addition to setting targets, budget allocation, and market design, another area where parliamentarians have the capacity to influence the acceleration of renewable energy deployment lies in the nexus approach, according to Kandeh Yumkella, a member of parliament in Sierra Leone and former Special Representative of the UN Secretary-General's Sustainable Energy for All (SEforALL) initiative. The nexus approach, integrating energy with health, water, food, economic development, and industrialisation, shows that the energy transformation “can bring social inclusion and also improve economic performance for the poor and for the economy as a whole”, he said.

While the need to boost access to and utilisation of renewable energy in rural communities is clear, the challenge often lies in ensuring that these solutions are cost-effective, especially in the early stages of deployment. Legislators in Nigeria have attempted to tackle this challenge by implementing specific regulations into the national renewable energy law to ensure that the government contributes to the establishment of renewable energy products, particularly mini-grids, with a third of its budget focusing on rural areas.



Rosaline J. Smith, Sierra Leone

Argentinian legislators have taken a more inclusive approach through the Law of Distributed Generation, which allows citizens to be directly involved in the energy transformation through the installation of solar PV systems and injection of surplus power into the electricity grid.

Such a system may not be easy to install for all levels of society. Former member of parliament Rosaline Smith from Sierra Leone, described a more accessible approach to inclusiveness, which has enabled women from rural communities, without the privilege of formal education, to attain the status of “solar engineers” who advance the goal of rural electrification. Today, Sierra Leone’s female solar engineers have installed almost 9,000 solar street lights and solar panels in over 3,000 homes, she added.

Integrating education and training into the energy transformation is another important facet of the social angle with lasting results – in Chad, legislators have devised a training programme that guides young adults towards self-employment in the agricultural sector through the use of solar irrigation systems, with a view to train 90 students within three years.

Given the variety of avenues for advancing the socio-economic dimension of the energy transformation as well as the urgency of the cause, governments are quickly realising the virtues of creating specialised agencies or parliamentary commissions to implement, monitor, and shoulder the responsibility of driving national renewable energy strategies. Ultimately, the social angle requires a broad set of innovative policies, as well as industrial, education, training, and social protection measures, to accelerate the energy transformation while ensuring that it is just, timely and equitable.

SUPPORTING RENEWABLE ENERGY DEPLOYMENT

SOME FACTS AND FIGURES

- » **Under current policies, the global renewable energy share is expected to reach just 21% by 2030, with modern renewables growing to 15% of total final energy consumption (TFEC), falling short of the substantial increase demanded by the SDG7 target;**
- » **Financing is one of the major challenges associated with increasing renewable energy deployment in developing countries. Most of these countries have vast, untapped renewable energy resources, but are unable to capitalise on them due to lack of investment and funding;**
- » **Ordinances and mandates are common policy tools that may be employed to encourage more sustainable building construction; for example, they can set minimum requirements for the share of renewable energy in a building's overall energy consumption or establish specific energy efficiency targets.**

With less than 12 years to double the current rate of deployment and reach the goal of universal access to affordable, reliable, sustainable and modern energy, the role of decision-makers in establishing viable renewable energy markets is especially crucial. Risk mitigation, particularly in the beginning stages of the energy transformation, often requires the injection of public capital into the deployment of renewables, said Mr. Yumkella.

As the largest renewable energy producer in the world, China is committed to achieving a renewable energy penetration rate of over 15% of total energy consumption by 2020, if not sooner, shared Chinese member of parliament Choy So Yuk. She attributed this fast development in renewable energy to two main factors: government commitment and technology development. From policies and measures requiring the installation of

individual solar panel heaters on all household buildings less than six stories high, to specific legislative framework and government investments, China has spent the past 15 years creating an environment that is conducive to the long-term development of renewable energy, she said.

This enabling environment, in turn, was complemented by rapid development in technology. Just six years after government financial support started, the Chinese renewable energy industry was able to reap the benefits of substantially lower renewable energy costs and continue developing without subsidies.

All we need to create the perfect environment for investments is political will

– Juan Carlos Villalonga, Member of Parliament, Argentina

State intervention does not necessarily imply subsidies alone. As explained by Argentinian member of parliament Juan Carlos Villalonga: “All we need to create the perfect environment for investments is political will”. While the first renewable energy legislation in Argentina was crafted in 1998, it took 17 years and multiple revisions for the law to be put into place within a national renewables programme, he said. Building on increased political will in recent years, the country now boasts two renewable energy production centres and has set concrete legal framework to achieve 30% renewable energy penetration in the energy mix under the Horizon 2030 programme.



Carlos Roman L. Uybarreta, Member of Parliament, Philippines

The political will to create an environment that is conducive to investment flows can often boost renewable energy development without public capital injection. The Philippines, for example, is embarking on a bid to create a one-stop shop mechanism aiming to reduce the processing time for energy projects by more than half of its current rate within the year, as shared by a member of parliament from the Philippines, Carlos Uybarreta.

State intervention in market facilitation requires a tailored approach that takes into account the nuances of national context, and can therefore result in the application and earmarking of a broad set of measures including institutional and capacity building, policy and legislation, and multi-stakeholder partnerships.

As explained by Senator Daniel Zamfir, Romania, which has achieved 24% renewable energy penetration as of 2018, employs the use of green certificates and fiscal incentives for investors. He added that in the next 10 years, state intervention is expected to focus on renewing electricity generation capacity, developing natural gas infrastructure and supply, supporting high-efficiency co-generation and modernisation of district heating systems, and reducing energy poverty through solutions that increase the energy efficiency of buildings.

These projects will tap into three channels of funding: the government, local authorities, and specific budgetary chapters of the European Union.

Indeed, not all states have the means of securing direct public or regional financing, in which case political will, accompanied by fiscal reforms have the potential to “translate SDG7 targets into economic drivers that can be felt in household budgets”. Belgian parliamentarian Willem-Frederik Schiltz proposed inducing demand by completely removing value-added tax on clean energy solutions.

Legislators in Nigeria, on the other hand, are considering amending the law to tax a percentage of the income of fossil fuel businesses, and channelling this tax revenue into national or regional renewable energy commissions and agencies.



Willem-Frederik Schiltz, Member of the Flemish Parliament, Belgium

Legislative action is an important pillar alongside political will in accelerating the development of renewable energy, as evidenced in the case of Tunisia. Upon realising that the use of fossil fuels has been contributing negatively to the country’s trade balance, legislators drafted a law in 2015 to encourage private sector engagement in the development of renewable energy, member of parliament Leila Ouled Ali recounted.

While parliamentary action has been challenged by lobbies arguing against the import of expensive technology needed for renewable energy projects, the government, convinced by a strong and consistent legislative voice, recognised the importance of renewable energy for economic development, social benefits, balance of trade, and energy security.

This year, Tunisia has passed a law reducing customs duties on renewable energy imports, and looks towards international procurement partnerships, further reducing the overall economic costs of renewable energy deployment and advancing the goal of universal access to affordable, reliable, sustainable and modern energy.

We need to translate SDG7 targets into economic drivers that can be felt in household budgets

– Willem-Frederik Schiltz, Member of the Flemish Parliament, Belgium

BRIDGING THE ENERGY ACCESS GAP:

A FOCUS ON AFRICA

SOME FACTS AND FIGURES

- » **Finding a sustainable way to meet growing energy needs of a region that is rich in renewable energy sources is one of the core development challenges for the African continent, where energy demand is expected to double by 2040;**
- » **Africa could meet nearly a quarter of its energy needs from renewables by 2030. With farsighted industrial policies and targeted skill development programmes, renewables could also create millions of new jobs in the continent;**
- » **95% of farmed land in sub-Saharan Africa relies on seasonal rains to meet water needs. Solar pumping for irrigation is reducing operating costs for farmers and improving crop yields, thereby supporting food security.**

The interconnected nature of the Sustainable Development Goals proves that the conventional view concerning trade-offs between economic growth and decarbonisation no longer holds. The multiplier effect of increased access to energy spurs benefits in climate change mitigation, human health and welfare, poverty reduction, educational progress, industrial diversification, job creation, and overall economic growth.

The interlinkage between SDG7 and other goals on poverty, health, food and water security, education, and gender equality is best exemplified in the case of Uganda, where only 27% of rural areas have access to energy, as stated by Lawrence Songa, a Ugandan parliamentarian. With a purely agro-based economy, limited access to energy is the biggest hurdle in the country's anticipated shift towards the secondary industry, he said. As a result, the majority of smallholder farmers often do not make enough money to meet living, health, and education needs, let alone invest in the growth of their trade.

Mr. Songa went on to explain that a vast majority of the population of Uganda does not have access to clean cooking solutions, meaning that the burning of firewood and charcoal is a widespread practice with serious health implications, particularly for women and children.



Winnie Kamau, Program Manager, Forum of Parliaments of ICGLR

The influx of refugees has increased the use of firewood and charcoal, raising the rate of deforestation. This not only has dire consequences for the agricultural sector, but aquatic life and the habitat as well, the latter of which forms a crucial part of tourism revenue. Pollution and siltation of water, in turn, raises the cost of water treatment, which is ultimately borne by the end-user.

Where strides have been made in ensuring universal primary education, the lack of access to energy and water threatens such progress. School-going children are now spending their afternoons in search of firewood and water instead of focusing on studying, with their academic performance being affected, Mr. Songa said.

Such scenarios are not limited to Uganda alone. Other legislators highlighted that this was the reality across many countries in Africa, with a growing list of interconnected challenges. Mali, for example, faces a significant problem with over 56% of the population living in extreme poverty. In Zimbabwe, 60% of the population, mostly living in rural areas, has no access to electricity.

What is not lacking, however, is political will. The Ugandan government has expressed interest in utility-scale solar systems to encourage the shift towards agro-processing. Legislators in Mali have implemented an enabling legal framework to encourage investment and public-private partnerships. Discussions drew attention to the fact that committees have been established in

many countries to monitor the implementation of SDG7 and engage in regional collaboration. Yet, with less than twelve years to 2030, most of the continent remains shy of achieving the goal of universal access to energy.



N'Doula Thiam, Member of Parliament, Mali

Considering what remains to be done to bridge the energy access gap, African legislators highlighted the need to advocate for demand-side management programmes to increase energy efficiency and access, encourage the uptake of off-grid renewable energy solutions, promote the use of transport based on renewable power and biofuels in order to reduce greenhouse gas emissions and traffic congestion, and review current budget appropriation mechanisms, with more funds being channelled towards rural electrification.

Parliamentarians are the bridge between the local and national level... [and] it is very important to have a coalition of parliamentarians of different political parties for success

– Bärbel Höhn, Energy Commissioner for Africa, Former Member of Parliament, Germany

Rural electrification in particular was deemed to be of utmost importance, with a legislator from Uganda stressing the need to think beyond only attracting investment and try to address the root of the problem. Access expansion strategies “must be extended to the rural poor.. before we can try and talk them out of this tendency of cutting down trees, destroying the environment, so that at least we have our lives improved”.

The challenges faced by African countries are not impossible to surpass. The number of people without electricity access in sub-Saharan Africa has started to fall in absolute terms, with progress overtaking population growth for the first time, recent statistics show. The key is to build on existing political will and devise a holistic energy transformation plan for each national context.

To this end, legislators called on IRENA to expand its outreach to members of parliament across Africa and institute national and regional programmes to facilitate exchanges, find viable solutions, and effectively carry out parliamentarians’ important role in boosting the use of renewable energy and advancing the goal of universal access to affordable, reliable, sustainable and modern energy across the continent.



Charles Ilukor, Member of Parliament, Uganda

PUBLIC-PRIVATE DIALOGUE:

ACTIONS NEEDED TO ACCELERATE THE ENERGY TRANSFORMATION

Following the conclusion of the Legislators Forum, IRENA convened parliamentarians, government representatives and members of the IRENA Coalition for Action to engage in a public-private dialogue on actions needed to accelerate the energy transformation.

The case for the shift to renewables has become increasingly compelling. Steady cost declines and increasingly evident socio-economic benefits, along with the opportunity for climate change mitigation, make renewable energy a good choice in business terms.

As a new *white paper* issued by the IRENA Coalition for Action points out, 53 national governments and over 280 sub-national governments have committed to reach 100% renewable energy within the next 30 years. But now, political will has to translate into action through concrete instruments complemented by the removal of subsidies for conventional energy sources.

In this regard, the discussion drew the following broad take-aways:

- » Political will, clear targets and a long-term policy framework that ensures broad and just participation in the energy transformation, are crucial to successfully scale up renewable energy to significantly higher levels;
- » Innovative strategies and technologies, increased system flexibility and the integration of different end-use sectors will enable the acceleration towards 100% renewable energy;
- » Long-term and effective carbon pricing and the removal of existing subsidies to fossil fuels are essential to speed up renewable energy deployment;
- » Non-discriminatory market access and locally adapted policy mechanisms are needed to allow both private and community-based investors to engage effectively in the energy transition.



Stefan Gsänger, Secretary-General, World Wind Energy Association and Chair, Community Energy Group, IRENA Coalition for Action

The crucial role of the private financial sector was discussed, with participants recognising that much of the costs required for the energy transformation must continue to come from the private sector. Encouragingly, the often cautious financial sector has already started decarbonising its energy portfolio. This could soon translate into set criteria for infrastructure and energy projects.

The discussion drew lines of action in creating an enabling environment for private sector investment and improving regulatory frameworks, particularly for off-grid and rural electrification. More broadly, boosting investor confidence requires the creation of a working market for renewable energy, which involves setting targets, removing administrative and financial barriers to implementation, installing long-term regulatory mechanisms, and providing avenues for public-private partnerships. Some participants underlined the need to ensure that the private sector can participate in the energy transformation without any prejudice and in a sustainable, levelled playing field alongside public and state-owned companies.

Public and private actors stressed the importance of local context and long-term value creation. Emphasising the many cases of successful collaboration between private and public sectors in developing countries, participants highlighted that the successful implementation of projects relies on the involvement of local partners and communities, thereby driving the social angle of the energy transformation and providing opportunities for knowledge-transfer and capacity building.



Andries Gryffroy, Member of the Flemish Parliament, Belgium, Rapporteur of the IPU Resolution on SDG7

Parliaments resolve to engage with private sector on sustainable, renewable solutions

The Geneva-based Inter-Parliamentary Union (IPU) recently adopted a resolution: *'Engaging the private sector in implementing the SDGs, especially on renewable energy'*.

The resolution, adopted unanimously by the IPU's 178 member-parliaments, draws attention to the potential of off-grid and mini-grid renewable energy projects to boost the implementation of SDG7 in developing countries. It also outlines important areas of action for parliamentarians, placing strong emphasis on the need to raise public awareness, ensure equal access to clean and reliable energy, adopt national development strategies and recognise the pivotal role of the private sector in implementing the SDGs.

In 2018, IRENA contributed to the discussions that led to the resolution's adoption.



REPORT TO THE ASSEMBLY ON THE 2019 LEGISLATORS FORUM

Members of parliament participating in the 2019 IRENA Legislators Forum emphasised the key role of renewables in accelerating the energy transformation and in reaching the goal of universal access to affordable, reliable, sustainable and modern energy by 2030 as set by the Sustainable Development Goal 7 (SDG7) in the United Nations 2030 Agenda for Sustainable Development. In this regard, discussions also focused on the significant role that parliamentarians can play in supporting and monitoring an integrated approach to the implementation of SDG7 by facilitating partnership and collaboration through inclusive national processes as well as effective and accountable institutions. To this end, legislators at the forum emphasised six key points to drive IRENA's parliamentary engagement:

- » Accessing reliable knowledge, information and data on the socio-economic benefits of renewable energy to support their efforts in adopting relevant legislation, allocating budget, and ensuring accountability for the implementation of the SDGs;
- » Institutionalising the Legislators Forum as a platform to further cultivate and connect a network of interested parliamentarians throughout the year, including developing a plan of action to support them in accelerating the energy transformation on the ground;
- » Pledging to work with IRENA in organising parliamentary meetings at the regional level in coordination with regional parliamentary networks and assemblies;
- » Developing a toolkit to support members of parliament in championing the uptake of renewable energy, through collaboration between IRENA, the Inter-Parliamentary Union, and other international and regional organisations;
- » Calling upon IRENA to facilitate the adequate transfer of technologies through capacity building and technical advice to assist parliamentarians launch initiatives in their constituencies;
- » Identifying and discussing opportunities stemmed by cross-border grid connections to address the challenge of integrating variable renewable energy in power grids.

The key role embodied by parliamentarians in establishing active networks towards these aims was recognised, and participants have called for working sessions on these issues with the inclusion of relevant stakeholders from the industry, and public and private sector entities.

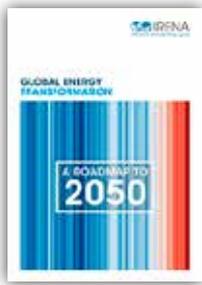
Legislators agreed that they are well-placed to enact the important changes that are required in the pursuit and achievement of the energy transformation. Through their representative function of the people's needs, concerns and best interest, parliamentarians have the legitimacy, the responsibility and the capability to bring a unique perspective to global discussions on the energy transformation and its linkages to the SDGs, and to ensure a just, inclusive and timely transition to a sustainable energy system.

In concluding the fourth IRENA Legislators Forum, parliamentarians once again welcomed the Legislators Forum as an effective platform to facilitate a sustained and continued dialogue between IRENA and parliamentarians, and across parliamentary organisations and associations. They echoed their support for such dialogues to promote the formulation of evidence-based policies and mechanisms.



Gabriela Cuevas-Barron, President, IPU, reporting back to IRENA Ninth Assembly on the 2019 Legislators Forum

SELECTED PUBLICATIONS



GLOBAL ENERGY TRANSFORMATION: A ROADMAP TO 2050 (2019 EDITION)

Increased use of renewable energy, combined with intensified electrification, could prove decisive for the world to meet key climate goals by 2050. This study from the International Renewable Energy Agency (IRENA) highlights immediately deployable, cost-effective options for countries to fulfil climate commitments and limit the rise of global temperatures. The envisaged energy transformation would also reduce net costs and bring significant socio-economic benefits, such as increased economic growth, job creation and overall welfare gains.

IRENA, April 2019



PLANNING AND PROSPECTS FOR RENEWABLE POWER: WEST AFRICA

Low-cost renewable energy, especially from solar photovoltaic (PV) installations, has become an increasingly important part of West Africa's electricity supply. This report outlines three broad scenarios for the growth of renewables in the region's power systems, particularly in relation to key national and regional targets.

English Français

IRENA, November 2018



GLOBAL LANDSCAPE OF RENEWABLE ENERGY FINANCE

Massive flows of finance are needed to accelerate renewable energy investments. More investment in renewables would reduce energy-related carbon emissions, a key element in efforts to limit global warming. This concise, accessible study examines finance flows to renewables around the world in 2013-2016, broken down by technology, financial instrument and region.

IRENA and Climate Policy Initiative, January 2018

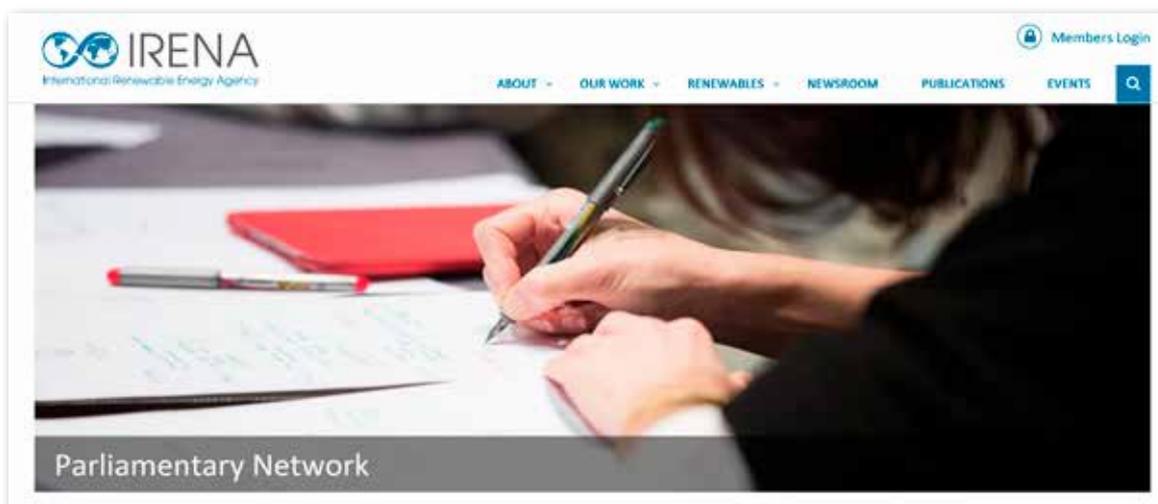
REVIEW FOR PARLIAMENTARIANS: PREVIOUS ISSUE

ISSUE 8 — IMPLEMENTING SDG7: THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOAL ON ENERGY



The UN High-Level Political Forum in July 2018 reviewed progress towards SDG7, providing a compelling platform for countries to share experiences and discuss measures to ratchet up the positive momentum of the ongoing energy transformation. IRENA, as one of the Custodian Agencies for SDG7 indicators, is supporting the review process by providing up-to-date renewable energy capacity and power generation data. IRENA's analytical work has also looked at actions to accelerate deployment and enhance linkages to other SDGs.

ENGAGING WITH IRENA THROUGHOUT THE YEAR



RReview for Parliamentarians



Legislators Forum



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