



# **IRENA 2014-2015:** AT A GLANCE

# Copyright © IRENA 2016

Unless otherwise stated, this publication and material featured herein are the property of IRENA and are subject to copyright by IRENA.

Material in this publication may be freely used, shared, copied, reproduced, printed and/or stored, provided that all such material is clearly attributed to IRENA and bears a notation that it is subject to copyright (© IRENA 2016).

Material contained in this publication attributed to third parties may be subject to third-party copyright and separate terms of use and restrictions, including restrictions in relation to any commercial use.

# About IRENA

The International Renewable Energy Agency (IRENA) is an intergovernmental organisation that supports countries in their transition to a sustainable energy future, and serves as the principal platform for international cooperation, a centre of excellence, and a repository of policy, technology, resource and financial knowledge on renewable energy. IRENA promotes the widespread adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind energy, in the pursuit of sustainable development, energy access, energy security and low-carbon economic growth and prosperity.

www.irena.org

## Disclaimer

The designations employed and the presentation of materials featured herein are provided on an "as is" basis, for informational purposes only, without any conditions, warranties or undertakings, either express or implied, from IRENA, its officials and agents, including but not limited to warranties of accuracy, completeness and fitness for a particular purpose or use of such content.

The information contained herein does not necessarily represent the views of the Members of IRENA, nor is it an endorsement of any project, product or service provider. The designations employed and the presentation of material herein do not imply the expression of any opinion on the part of IRENA concerning the legal status of any region, country, territory, city or area or of its authorities, or concerning the delimitation of frontiers or boundaries.

Cover photos©Shutterstock



# **INTRODUCTION**

1. This summary report takes stock of achievements made in the course of 2014-2015 and provides an account of external and internal developments that have shaped IRENA's activities. With the completion of the first biennial programmatic cycle, it is evident that this framework allowed the Agency to have a more strategic approach to responding to changing needs. The two-year period included a number of external developments that had a profound impact on the energy sector, renewables in particular, which, by extension, affected the programme's implementation. The dynamic nature of the renewable energy sector in the changing global landscape, coupled with internal developments, such as strategic discussions on the future of IRENA and the first external evaluation of its impact, have provided momentum for future.

*IRENA 2014-2015: At a Glance* summarises selected programmatic activities, highlights key renewable energy developments and provides and overview of IRENA's global engagements in the course of 2014-2015.

"IT IS AN EXCITING TIME TO BE IN ENERGY. IF WE CAN OPEN MORE EYES TO THE TRANSFORMATIONAL MOMENT AT HAND, AND GIVE A SENSE OF THE MAGNITUDE OF THIS TREMENDOUS OPPORTUNITY, WE WILL HAVE SUCCEEDED."

> ADNAN Z. AMIN IRENA DIRECTOR-GENERAL RETHINKING ENERGY LAUNCH TOKYO, SEPTEMBER 2014

# TRANSFORMATION IS UNDERWAY

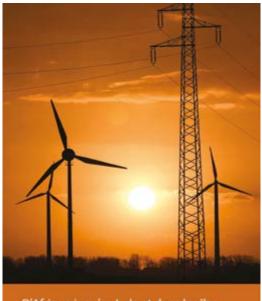
**2.** The energy sector is undergoing one of the most transformative changes in its history. A convergence of factors, including the evolving energy policy and climate agenda, business model modifications shifting preferences and driven by expectations, and accelerated technology changes, provide unprecedented challenges and important opportunities for the energy sector. Renewable energy technologies have moved from the margins to the centre stage. In particular, in the last two years, renewable energy has attained a prominent role in sustainable development, in decarbonising economies, and regarding the long-term solutions it offers.

**3.** The global focus on finding practical solutions to climate change has added prominence to the renewable energy sector. IRENA's REmap 2030, a global roadmap for doubling the share of renewable energy in the global energy mix by 2030, shows that this doubling can only be achieved by three interlinked objectives of significantly higher renewable energy uptake, greater access to modern energy services, and improvements in energy efficiency. Importantly, achieving this doubling would result in setting the world on a pathway to keep global warming under 2°C. REmap 2030 also noted that this could be done in a cost-effective manner that stimulates economic activity and with a positive effect on the health and well-being of millions, resulting in external cost savings worth billions.

**4.** For IRENA, this recognition has had a direct impact. IRENA has been called upon to take the lead in catalysing renewable energy action in support of the global effort to stabilise the climate system. In 2014, the centrality of renewable energy to addressing the climate change was highlighted at the UN Secretary-General's Climate Summit, as well as at COP20 in Lima, Peru. The action for climate culminated at COP21 in Paris, France, where IRENA was present and active throughout the two weeks of negotiations, highlighting success stories in the ongoing transition to renewable energy, and the benefits inherent in accelerating its deployment. Among other things. IRENA led two major events. On Sunday 6 December, some 1,000 participants joined live and via webcast the RE-Energising the Future high-level event featuring renewable energy solutions, innovations and actions. On Monday 7 December, together with France and SE4ALL. IRENA organised the Lima-Paris Action Agenda Energy Day, a full-day programme featuring announcements on initiatives, targets and alliances to further the energy transition.







D'Afrique juqu'en Inde et dans les îles, les initiatives pour l'énergie renouvelable transforme le système énergétique de demain.

ET CE N'EST QUE LE DÉBUT.

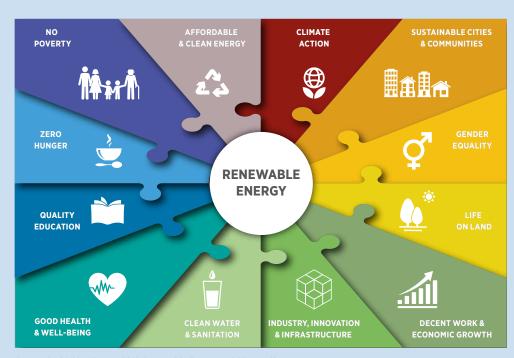
unfccc.int/lpaa | @LPAA\_live

WE .....

Source: COP21

5. With the backdrop of the UN Secretary-General's Climate Summit and COP20 in Lima. Peru, in 2014, and COP21 in Paris, France, in 2015, IRENA has focused its programmatic work on showcasing that renewable energy is a readily available, economically attractive solution to the climate challenge. This is increasingly evident for a wide number of countries, the private sector, and civil society groups, who are voicing support for a clear, long-term goal of shifting from fossil fuels to clean energy. COP21 is a critical milestone for IRENA's work in the current programmatic cycle. It also marks a new beginning, as the world moves the climate action agenda forward with renewable energy at the heart of the effort.

**6.** 2015 brought another notable change with the UN General Assembly adoption of the Sustainable Development Goals (SDG). The work undertaken since 2012 under the umbrella of the decade for Sustainable Energy for All (SE4ALL) has been consolidated into SDG7 on energy. SDG7 calls for a substantial increase in the share of renewables, doubling the global rate of energy efficiency and universal access to modern, affordable and reliable energy. These three interconnected elements of SDG7 bring global recognition to the transformation toward more sustainable energy systems. IRENA. the SE4ALL Renewable Energy Hub, remains engaged in the efforts to translate the ambition of SDG7 into measurable, concrete steps that will help realise this goal by 2030.



# LINKAGES BETWEEN RENEWABLE ENERGY AND SUSTAINABLE DEVELOPMENT GOALS

Source: Rethinking Energy 2015: Renewable Energy and Climate Change,

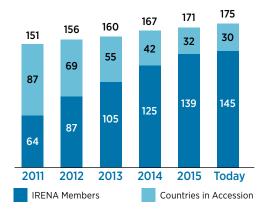
Access to reliable, cost-effective and environmentally sustainable modern energy services can have a multiplier development impact, reflected in reduced health effects, improved livelihoods, poverty alleviation, job creation, gender equality and enhanced access to water and food.

NFOCUS

# 

# Highlight:

IRENA's membership has more than doubled in the last four years.



\* Numbers at 1 January, every year

7. As the focus on renewable energy increases, so does the need for international cooperation, which is reflected in IRENA's steady membership growth. Since January 2014, 20 new countries have joined the Agency, with membership totalling 145 as of December 2015, with over 30 in the different stages of the accession process. With its growing membership, IRENA has become the main platform for international cooperation and a strong voice for renewable energy. IRENA will continue to play an important role in the global effort to decarbonise energy, find new paths to energy security and provide universal energy access to help lift millions out of poverty.



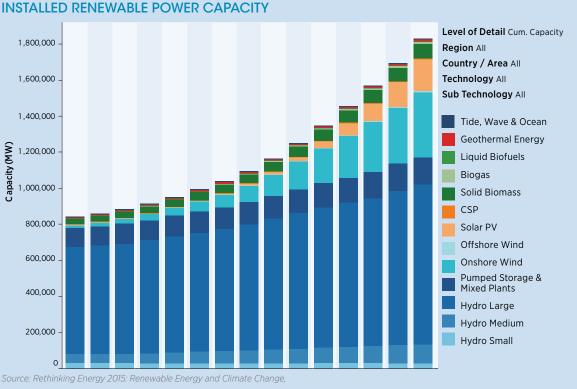
# RENEWABLE ENERGY HAS MOVED FROM THE MARGINS INTO THE MAINSTREAM

8. Worldwide, renewable energy power capacity has grown 85% over the past 10 years, constituting 30% of all installed power capacity, the largest share of any source. This trend, together with rapid innovation in renewable energy and enabling technologies, shows that the development and deployment of renewable energy technologies are accelerating. While remarkable progress has been made in the power sector, the potential of renewables is yet to be fully reached. This is particularly true for end-use sectors, and the next phase will focus on tapping into these vast potentials, designing an optimal mix of all sources of renewable energy, and developing enabling technologies and infrastructure.

# POLICY FRAMEWORKS AND MARKET CONDITIONS ARE ENABLING INVESTMENT AND GROWTH

**9.** In 2014, over 270 billion US dollars (USD) was invested in renewable energy deployment, an increase of more than 15% from 2013 and more than five times higher than a decade ago. Falling costs

Over **270** billion US dollars was invested in renewable energy deployment



Renewable power generation capacity accounted for 1,828 gigawatts (GW) in 2014, compared to around 1,500 GW from gas-fired power stations and 1,880 GW from coal-fired power stations globally. The majority of power generation comes from hydropower (1,172 GW), followed by wind power (370 GW), and solar photovoltaics (175 GW).

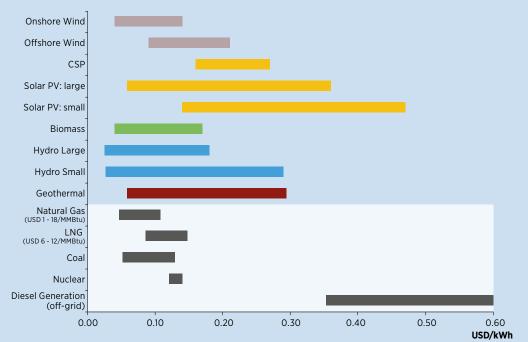
6

are making renewable energy increasingly cost-competitive, and early estimates for 2015 indicate record growth worldwide. For instance, Chile's investment in renewables increased more than eightfold from USD 180 million in the third quarter of 2014 to USD 1.6 billion a year later, while the United States invested over USD 13 billion, an increase of 25%.

**10.** IRENA analyses demonstrate a sustained decline of the cost of renewable energy technologies, which now provide electricity competitively at the utility scale compared to conventional alternatives. Mature technologies such as biomass, hydropower and geothermal are already competitive. Other technologies are becoming increasingly competitive.

Highlight: The IEA/IRENA Joint Database features 1,900 policies from 124 countries and is consulted by more than 67,000 users.

**11.** Onshore wind, already deployed in more than 100 countries, is now one of the most competitive sources available, with some projects around the world delivering electricity for as low as 0.04 USD/kWh without financial support. There are similar trends for solar PV, with a landmark tendering of 100 MW in Dubai, United Arab Emirates, resulting in a price of less than 0.06 USD/kWh.



# FALLING COSTS OF RENEWABLES

Renewable power generation technologies have achieved remarkable improvements in their competitiveness, and are increasingly competing head-to-head with incumbent technologies, as was demonstrated in *Renewable Power Generation Costs in 2014*. To ensure Members have the latest analysis IRENA is examining the future cost reduction potentials for solar PV, concentrated solar power (CSP), and onshore and offshore wind.

**12.** As of early 2015, 164 countries had adopted at least one type of national renewable energy target, with developing and emerging economies accounting for 131 of these. Reaching these targets requires designing and implementing innovative policies. In 2014-2015, IRENA focused its work on renewable energy target formulation, in order to help countries refine and improve their targets. With the emergence of auctions in many markets, IRENA also focused on providing guidelines and best practices on their design and implementation.

**164** countries adopted at least one type of national renewable energy target by early 2015

**13.** There is also growing evidence that renewable energy has a positive ripple effect throughout society, simultaneously advancing economic, social and environmental goals. It can decouple energy sector expansion from emissions growth and water use, as well as reduce losses in the system through distributed generation. IRENA's GCC Renewable Energy Market Analysis indicates that meeting stated renewable energy targets and plans results

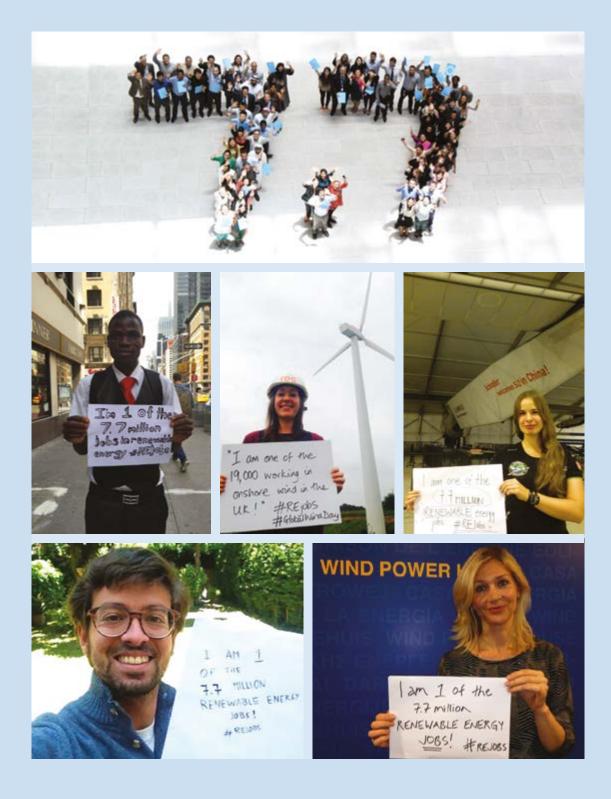
in savings of more than three billion barrels of oil – a 9% reduction in the GCC (Gulf Cooperation Council) carbon footprint per capita. Reaching national targets would also reduce power sector water withdrawal by 20 trillion litres annually, equivalent to a 22% reduction, and create roughly 170,000 direct jobs per year from now until 2030.

**14.** Renewable energy benefits are best understood as part of a holistic strategy to promote economic prosperity, well-being and a healthy environment. IRENA's recent analysis in a report entitled "Renewable Energy Benefits: Measuring the Economics" demonstrates that doubling the share of renewables by 2030 leads to positive impacts on GDP, welfare, trade and jobs. IRENA's annual review of renewable energy and jobs highlights that the renewable energy sector has already become a major employer, which is growing rapidly. The 2014 review showed 6.5 million jobs, a 14% growth compared to 2013. The 2015 review showed a further increase of 18%, amounting to approximately 7.7 million jobs globally, and a total of approximately 9.2 million jobs when including large hydro.

**7.7** million renewable energy jobs globally

# Highlight:

Renewable Energy and Jobs – Annual Review 2015 received over 2.5 million social media impressions in the first week after its launch. A first global estimate of the large hydropower industry revealed that it employs 1.5 million people.



# **IRENA PROGRAMMATIC ENGAGEMENTS IN 2014-2015**



# 2014

# JANUARY

## • REmap 2030: Summary of Findings

# FEBRUARY

 Evaluating Renewable Energy Policy: A Review of Criteria and Indicators for Assessment

# MAY

- Renewable Energy and Jobs Annual Review 2014
- The Socio-economic Benefits of Solar and Wind Energy Adapting Renewable Energy Policies to Dynamic Market Conditions

# JUNE

- Renewables Readiness Assessment: Peru
- REmap 2030 Full Report Renewable Energy in Manufacturing
- Renewable islands: Settings for Success
- IRENA Ocean Energy Technology Briefs
- Pan-Arab Renewable Energy Strategy 2030;
- Roadmap of Actions for Implementation

# AUGUST

- Estimating the Renewable Energy Potential in Africa:
- A GIS-based approach
- Renewable Energy Opportunities for Island Tourism Ocean Energy: Technologies, Patents, Deployment Status and Outlook

# SEPTEMBER

 Global Bioenergy Supply and Demand Projections REthinking Energy: Towards a New Power System

# **NOVEMBER**

 Renewable Energy Prospects: China Renewables Readiness Assessment: Sultanate of Oman

# DECEMBER

- Renewables Readiness Assessment: Swaziland
- IRENA Handbook on NAMAs, 2nd Edition
- The Philippines: Solar, Wind and Bioenergy Resource Assessment

# 2015

- JANUARY
- Renewable Energy Prospects: United States of America
- Renewable Energy Roadmap for the Republic of Cyprus Renewable Power Generation Costs in 2014
- Battery Storage for Renewables: Market Status and
- Technology Outlook
- Renewable Energy in the Water, Energy & Food Nexus Africa Clean Energy Corridor: Analysis of Infrastructure for
- Renewable Power in Eastern and Southern Africa

# FEBRUARY

- Renewable Energy Options for Shipping
- A World of Renewables (Global Atlas)
- Solar Heating and Cooling for Resident Applications (tech. brief)

- Solar Heat for Industrial Processes (tech. brief)

# MARCH

 Africa Power Sector: Planning and Prospects for Renew Energy (synthesis report)

# APRIL

- Renewable Energy Prospects: United Arab Emirates
- Biomass for Heat and Power (tech. brief) Hydropower (tech. brief)

# MAY

- Renewables Readiness Assessment: Diibouti
- Renewable Energy and Jobs Annual Review 2015
- Renewable Energy Prospects: Mexico

- JUNE Renewables and Electricity Storage
- Renewable Energy in Latin America 2015: An Overview of Policies
- Renewable Energy Target Setting
- Renewable Energy Auctions: A Guide to Design
- Renewable Energy Capacity Statistics 2015 A path to Prosperity: Renewable Energy for Islands

# JULY

- Renewables Readiness Assessment: Republic of the Marshall Islands
  - Renewables Readiness Assessment: Fiii
  - RD&D for Renewable Energy Technologies: Cooperation in Latin America and the Caribbean

# AUGUST

 Synergies between Renewable Energy and Energy Efficiency

**MAJOR PUBLICATIONS** 2014-2015



Renewables Readiness Assessment: Vanuatu

# SEPTEMBER

Renewables Readiness Assessment: Mauritania

# OCTOBER

- Renewable Energy Zones for the Africa Clean Energy Corridor
- Africa 2030: Roadmap for a Renewable Energy Future
- Renewable Energy integration in Power Grids (tech. brief)
- The Age of Renewable Power: Designing national roadmaps for a successful transformation
- REmap 2030: Renewable Energy Prospects for Poland

# NOVEMBER

- Renewable Energy Prospects, Germany
- Renewables Readiness Assessment: Ghana
- Rethinking Energy 2015: Renewable Energy and Climate Change

# DECEMBER

Quality Infrastructure for Renewable Energy Technologies

**15.** Support for renewables, through enabling policy frameworks, legislation, standards and quality infrastructure, is required even as renewables' competitiveness increases. The first edition of IRENA's institutional publication, REthinking Energy 2014, highlighted that increased renewables uptake requires:

- Long-term commitment to the creation of an energy system that is diverse, resilient and environmentally sustainable;
- » A system-level approach to renewable energy deployment that considers developments in costs and technologies as well as the interests of different stakeholders in the energy sector;
- » Creation of an enabling environment by addressing other market-related aspects such as access to finance, permits, grid connection, energy pricing structures and capacity building; and
- » Support for the effective and efficient integration of renewables through targeted measures such as timely planning for grid infrastructure, RD&D, and close coordination with different stakeholders.

**16.** Creating a framework that delivers secure, affordable and sustainable energy to underpin the economic and social development is one of the most important challenges facing many governments today. Renewables are increasingly the preferred solution. Renewable energy is abundant and scalable, and every country has indigenous renewable resources that can be harnessed and integrated into the domestic energy mix.

**17.** IRENA continues to assist countries in their efforts to increase the share of renewables in the energy mix, including through the Renewables Readiness Assessment (RRA) to create an enabling framework. To date, 26 countries have undertaken the RRA process and, looking at the recommendations that emerge from these processes, the majority are related to policy and strategy, planning, and legal and regulatory frameworks. A number of countries have already implemented select RRA recommendations and are integrating them into their long term energy strategies. Many RRAs also highlight the economic and strategic benefits of cross-border trade and regional integration.

**18.** Advancing pragmatic and sustainable global development requires meaningful consideration of economic, social, and sustainability issues. Renewable energy solutions need to be aligned with broader development strategies, so that they are not limited by existing infrastructure. IRENA has worked with the countries of the Eastern and Southern Africa Power Pools to find new technology and market solutions that would support their development agendas through the provision of clean, indigenous, cost-effective renewable power. The Africa Clean Energy Corridor (ACEC) aims to transform the continent's energy mix by enabling countries to make more use of their abundant renewable energy resources. ACEC is proving to be an effective model that could be replicated in other regions, and IRENA is partnering with stakeholders in West Africa, Central America, countries of the Association of South East Asian Nations (ASEAN) and the Maghreb region to explore potential for the development of other regional clean energy corridors.

**19.** Indigenous renewable options also open new possibilities for meeting the needs of the poorest people currently without access to energy. Decentralised solutions promote productive uses, spur education, allow access to modern communication, transform lives and offer a host of new economic opportunities. IRENA's International Off-grid Renewable Energy Conference (IOREC), held

# INTERNATIONAL ENERGY WORKSHOP

On 3-5 June, 2015 IRENA hosted the 34th Annual International Energy Workshop (IEW) in Abu Dhabi. Convening some 200 modellers, energy scholars and researchers, the IEW saw over 100 papers presented on topics of energy supply and price forecasts, energy savings and efficiency, renewable and innovative energy technologies, environmental and climate policy, and the intersection between energy analysis, economics, and the natural sciences.



# CONTRIBUTION TO THE DEVELOPMENT OF THE FORTHCOMING 25-YEAR ENERGY MASTER PLAN OF OMAN

In October 2015, IRENA participated in the *Oman Energy Forum* in Muscat to discuss, draft and shortlist critical recommendations to be included in the forthcoming 25-year Energy Master Plan of Oman. Organised under the auspices and guidance of the Omani Ministry of Oil and Gas, the forum gathered more than 100 national and international experts to formulate recommendations in sessions focusing on energy demand, energy supply, research and development, human capital and the water, energy and food nexus.



Drawing on various IRENA projects such as *Renewables Readiness Assessment: Oman; Regional Market Analysis: GCC* and *Renewable Energy in the Water, Energy and Food Nexus*, IRENA highlighted that renewable energy provides a sustainable and cost-effective solution to the challenges posed by rising demand of energy and water in Oman. The delegates of the forum concluded that Oman needs to devise a long-term strategy to diversify its energy mix and add alternative power generation sources such as renewable energies, while also enhancing energy efficiency and improving demand-side management both on an individual and industrial level.

# AFRICA CLEAN ENERGY CORRIDOR

The ACEC Communiqué calls for action in five key areas, namely zoning and resource assessment, country and regional planning, enabling frameworks for investment, capacity building, and public information. IRENA prioritised its activities in ACEC on zoning and resource assessment, enabling regulatory environments and capacity building. In collaboration with the Lawrence Berkeley National Laboratory (LBNL), IRENA developed a renewable energy zoning methodology which was validated by stakeholders from utilities, governments, regulatory bodies, Power Pools and academia from within the region.



Chairperson of the African Union Commision, H.E. Dr. Zuma, launched the Africa Clean Energy Corridor at the 2014 Climate Summit

*Renewable Energy Zones for the Africa Clean Energy Corridor* includes interactive maps with information on levelised cost of electricity, generation potential, and proximity to existing infrastructure. The publication was launched at the South African International Renewable Energy Conference in October 2015. The maps are available on the Global Atlas website, as well as the mapre.lbl.gov website. Training on the zoning methodology development and on how to input data was conducted in September 2015 to ensure that country stakeholders are able to maintain, update and refine zoning assessments.

in June 2014 in the Philippines, convened over 400 stakeholders to discuss how best to tap into the vast potential that renewable energy systems offer in rural settings. IOREC emphasised that off-grid and mini-grid renewable energy systems are now the most cost-effective solution for electrification in the majority of rural areas. Among the key messages that emerged from the two-day deliberations was the urgent need to change mind-sets and strategies from a grantdriven approach towards a market-based entrepreneurial approach.

**20.** Small Island Developing States (SIDS) have been early advocates for the uptake of renewable energy. Most are rich in renewable energy resources and have already adopted ambitious strategies and targets that can transform their economies and societies. SIDS are also the most vulnerable to changing climate patterns, and the incursion of rising sea levels can damage natural habitats, intrude on natural resources, disrupt economies, and negatively impact livelihoods. To support the strategic deployment of renewables in SIDS, and to enable targeted action, IRENA developed the SIDS Lighthouses Initiative. A joint effort by SIDS and development partners, this framework for action assists transformation of SIDS energy systems. Further, these experiences can help address the needs of the 1.1 billion of people worldwide without access to modern energy services.

# SYSTEM OF THE FUTURE

21. While there is widespread agreement that the share of renewables will continue to rise, the ideal future electricity system design is still not apparent. Grid and storage technology solutions are critical for the successful integration of high shares of variable renewables and the creation of the new energy system. Rapid technology progress in this field, such as the concept of smart grids, has opened new opportunities. The new energy systems must consider all the potentials countries have at their disposal: from mature technologies such as biomass, hydropower and geothermal, through increasingly cost-competitive wind and solar, to emerging marine options. IRENA continues to provide objective, timely and policy-relevant information on each of these technologies, and provides a platform for cooperation on specific issues.

**22.** The widespread ambition for the deployment of renewable energy requires mobilising concomitant investments. Analysis of case studies in Africa, Asia and Latin America has shown that an innovative use of public funds can have a multiplier effect and can leverage private funds. Most investment will come from the private sector which, increasingly, supports renewable energy projects. The real and perceived risks that inflate financing costs continue to pose an obstacle to the deployment of renewables

# Highlight:

The electricity storage roadmap found that for islands and grids in remote areas, electricity storage systems are already a costeffective solution to facilitate the transition from diesel generators to renewable power generation. In larger systems, pumped-storage hydropower is the most important electricity storage technology to support the integration of variable renewables into the grid.

# RENEWABLE ENERGY FORUM, APIA, SAMOA

The SIDS Lighthouses Initiative is now a joint effort of 27 SIDS and 14 other partners to support the strategic deployment of renewable energy in SIDS and to enable targeted action.

An important milestone in advancing the Initiative was the Third International SIDS Conference that took place in Samoa in September 2014. In preparation for the Conference, IRENA, together with the Governments of Samoa and New



Zealand, hosted a Renewable Energy Forum, which confirmed the pivotal role that renewable energy plays in the SIDS' sustainable development and climate change efforts. The Conference outcome document, the SAMOA Pathway, calls on IRENA to play a leading role in accelerating the deployment of renewables in SIDS.

# **GLOBAL GEOTHERMAL ALLIANCE**

In support of greater geothermal deployment, IRENA supported the creation and growth of the Global Geothermal Alliance (GGA), a partnership for action to better address the challenges countries face when seeking to exploit their geothermal potential. The GGA offers a platform for dialogue, cooperation and coordination to governments, development partners and industry.



A multi-stakeholders gathering took place in Nairobi in June

2015 to discuss the strategic orientations of the GGA. The GGA was once more discussed at a highlevel side event in Paris in December 2015, and formally launched as part of Lima-Paris Action Agenda Energy Day at the COP21. The President of Iceland, French Minister of Ecology, Kenyan Minister of Environment and New Zealand's Minister of Energy participated in the launch event.

# **RE100 CAMPAIGN**

Since the RE100 campaign was launched in 2014, more than 50 major companies have joined the campaign and committed to source 100% of their electricity from renewables. In the context of its efforts to reach out to private sector constituencies, IRENA is partnering with this momentous global campaign as it continues to roll out across industrial sectors and countries around the world.



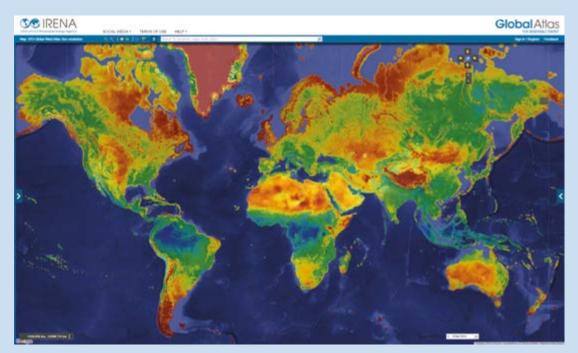
even where resources are plentiful. IRENA's contribution in this context is focused and practical, bringing effective tools and instruments that facilitate renewable projects, enable private sector investment, and increase transparency for countries on options available.

**23.** IRENA developed the Sustainable Energy Marketplace to facilitate investment in projects in developing countries, starting from Africa, Latin America and the Caribbean. The Marketplace convenes stakeholders including project developers and owners; public and private financing entities, advisors, service and technology providers and governments. The Marketplace makes projects, financing instruments, as well as service and technology providers, visible and easily identifiable. The platform also provides links to IRENA's existing tools and databases of high relevance for project development and implementation, notably the Project Navigator, REsource, the Global Atlas and the IEA/IRENA Joint Policies and Measures Database.

**24.** The Marketplace covering Africa Clean Energy Corridor (ACEC) countries was announced at the SAIREC conference in South Africa in October. In November and December the Marketplace was expanded to cover all African countries. And in December a dedicated portal for the Caribbean, as a pilot for the SIDS part of the platform, and another portal for Latin America were finalised. The Marketplace was officially launched at COP21 in Paris on 7 December 2015.

# INFOCUS

# GLOBAL ATLAS FOR RENEWABLE ENERGY



IRENA's Global Atlas for Renewable Energy, the world's largest database on renewable energy potential, hosts more than 1,500 datasets with over 95,000 viewers worldwide. Global Atlas partners include 67 countries, 8 multilateral initiatives and 50 technical institutes, companies and organisations.

# TAKING STOCK: IRENA 2014-2015 WORK PROGRAMME IMPLEMENTATION AND IMPACT

**25.** Through its studies, workshops, training, and technical support to countries described in this report, IRENA seeks to generate and share knowledge that will lead to investments in energy services, improved livelihoods and economic transition worldwide. Reaching its fifth year of existence, IRENA has undertaken an independent review of the Agency's work to date to assess both the impact made and to obtain an external perspective on how to best continue to deliver its mandate. The six-week evaluation consisted of a range of activities including surveys, interviews and desk review of a variety of internal and external products.

Downloads of IRENA publications have grown an average of **210%** annually

**26.** A membership-wide survey resulted in 46 responses from a diverse mix of Members. The survey provided an excellent overview of Members' views on IRENA's effectiveness and impact, and indicated the areas that could be analysed in more detail. This survey has been complemented with in-depth interviews of 25 individuals comprising Members, private sector and other stakeholders. The evaluators also undertook an internal survey of IRENA staff, as well as a range of interviews across functions and levels. The process included a thorough analysis of IRENA publications and outputs and their impact in the broader energy landscape.

# Press coverage of IRENA has grown 25%+ year-on-year

**27.** The overall qualitative evolution of the impact to date has been positive. The majority of those contributing to the evaluation process stressed that IRENA has made remarkable progress in establishing itself as a credible, modern Agency that responds to the needs of its membership. Despite its short tenure, IRENA is deemed to have delivered significant and tangible achievements, is considered a source of authoritative information and advice, and has increasingly sought-after products.

**28.** The evaluation also reconfirmed some of the key points that have been discussed in the course of preparation of the Work Programme and Budget 2016-2017, and the strategic discussion on the future financing of the Agency. The evaluation results noted

Academic citations have increased **30%** year-on-year that, to ensure that the Agency's limited resources deliver the greatest impact, prioritisation of efforts and strategic and systematic formulation of partnerships will be key for the future. The survey results also emphasised that IRENA's work to date has provided a solid foundation for the Agency to enter a new phase. Detailed findings of the evaluation are being made available to Members.

**29.** To ensure effective management and administration of programmatic activities, the 2014-2015 Work Programme has been structured along 31 projects, covering 123 deliverables, including deliverables that were subject to additional voluntary contributions. To date, 101 deliverables are or will be completed by the end of 2015, 11 are in progress, and 11 are closed as additional resources have not been identified. A matrix annexed to the full annual report contains a detailed account of the implementation status for the 2014-2015 biennium.

# Website page views have grown at a rate of **25%** annually

**30.** The progress to date has been greatly facilitated by the timely receipt of Members' contributions. To date, 99.5% has been received of assessed contributions for 2014, and 94.5% for 2015. In addition, USD 9.2 million was received from Germany and USD 14.8 million from the UAE, as part of budgeted core non-assessed contributions. Over USD 15 million was pledged in additional voluntary contributions from Belgium, France, Germany, Iceland, Japan, New Zealand, Norway, Sweden and Switzerland, with USD 8.3 million received to date.



In June 2015 the IRENA Headquarters building was inaugurated in Abu Dhabi, UAE.

"IF THE POLITICAL WILL AND ENABLING ENVIRONMENT FOR INVESTMENT IS THERE, THERE ARE ENOUGH RESOURCES AROUND THE WORLD FOR THE TRANSITION TO A LOW-CARBON ECONOMY BASED ON SUSTAINABLE ENERGY. NOT IN THE FUTURE, BUT TODAY."

> ADNAN Z. AMIN IRENA DIRECTOR-GENERAL SUSTAINABLE DEVELOPMENT SUMMIT NEW YORK, SEPTEMBER 2015

IRENA Headquarters Masdar City • P.O.Box 236, Abu Dhabi • United Arab Emirates • Tel: +971 2 417 9000

IRENA Innovation and Technology Centre Robert-Schuman-Platz 3 • 53175 Bonn • Germany • Tel: +49 228 391 79085

IRENA - Office of the Permanent Observer to the United Nations Uganda House • 336 East 45th Street, 11th Floor • New York, NY 10017 United States of America • Tel: +1 646 738 2010







www.irena.org



info@irena.org



www.twitter.com/irena



www.facebook.com/irena.org

