IRENA
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Report of the Director-General
Financing of the Agency - strategy for the future

I. Introduction

1. This report is submitted pursuant to the request of the Assembly at its fourth session that the Director-General works with the Council to, *"seek innovative options for future funding opportunities for the Agency, in accordance with the provisions of Article XII/A.3 of the Statute, and to report on the progress made at the fifth session of the Assembly."* (A/DC/4/1).

2. In the course of 2014, the Council discussed options for future funding opportunities based on the notes provided by the Director-General to facilitate Members' dialogue (please refer to documents C/7/2 and C/8/CRP/1). At its seventh meeting, the Council highlighted key elements for consideration in developing a funding strategy for IRENA and emphasised that funding must be closely linked to the Agency's strategic and programmatic objectives.

3. At its eighth meeting, the Council considered emerging strategic priorities based on a discussion led by the Council Chair on "*The Global Energy Transformation: The Increasing Relevance of Renewable Energy and the Evolving Role of IRENA*". The Council also considered some programmatic priorities for the Agency and possible options for future financing. It noted upcoming milestones, including the preparation of the Work Programme and Budget 2016-2017 which will be considered by the Council in its spring and fall meetings in 2015. Further, the Council noted Assembly's upcoming review of the 2013-2017 Medium-term Strategy (MTS) during its sixth session in 2016. In this context, the Council stressed the importance of the review of strategic objectives and the means by which IRENA's vision is achieved with the view to the continuously increasing economic and geopolitical significance of renewable energy in the global energy mix.

4. The present report provides some perspectives emerging from the consultations on the future role of the Agency and options for funding opportunities. The early engagement of Members will greatly facilitate the development of the work programme and budget 2016-2017, as well as the forthcoming review of the MTS. Members may wish to consider the perspectives contained in this report and provide further guidance to the Secretariat in the preparation of the biennial Work Programme and Budget for 2016-2017.

II. The future of renewable energy

5. In its recent report, *REthinking Energy*, IRENA examined the main drivers for transformation of the global energy system. Over the past 40 years the world's population grew from 4 billion to 7 billion people, marked with an increasing proportion of middle class and rapid urbanization. During the same period, electricity generation grew by more than 250%. The report highlights that, in 2030, there will be more than 8 billion people, with 5 billion in urban conglomerations. Global spending by the middle classes is expected to more than double, and the world electricity generation is forecast to grow by 70%.

6. *REthinking Energy*, affirmed by the Council discussions, points that there are compelling reasons for changing the current energy mix to meet this demand, and that renewable energy will play a central role in the effort to transform the global energy system. Some of the key strategic considerations to guide the development and resourcing of future programming are outlined below.

- **Renewable energy costs continue to fall**. Renewable energy costs continue to fall. Large-scale hydro, geothermal and biomass power have been competitive for some time. Over the past decade, and in particular over the last five years, solar and wind are increasingly reaching grid parity. Solar photovoltaic (PV) prices have fallen up to 80% since 2008 and are expected to keep falling. In 2013 and 2014, commercial solar power reached grid parity in Italy, Germany, parts of the United States and Spain and will do so soon in a range of other countries including Mexico and France. The cost of onshore wind electricity has fallen by around 20% since 2009 in major markets and as much as 35% in some of them, with turbine costs falling by an average of around 30% since 2008/2009. Combined with technology advances that have improved capacity factors, wind is now often the cheapest source of new electricity in a wide and growing range of markets and more than 100 countries now use wind power. Offshore wind is also expected to grow rapidly, although from a small base, and costs are expected to fall in the near future. The United Kingdom is leading the offshore wind market with 4.2 gigawatts (GW) of installed capacity as of mid-2014. Hydropower was also estimated to have had a strong year in 2013, with around 40 GW of new capacity. About 0.5 GW of geothermal capacity was added in 2013, driven by the United States, Indonesia, Kenya and New Zealand. The capacity of bioenergy-fuelled plants went up 5 GW in 2013, as developed and developing countries are increasingly turning to bioenergy (including agricultural residues and wastes) for electricity generation purposes.

➔ These developments, coupled with growing robustness and efficiency of technologies, have made investment in renewable energy increasingly attractive. Globally, renewable energy power capacity has grown 85% over the past 10 years, and renewables today constitute 30% of all installed power capacity, the largest share of any source.

- **Renewable energy is essential to stabilising the climate system.** The latest IPCC report emphasised the need to act quickly and reduce carbon emissions to avert the catastrophic effects of climate change. The report stressed that tripling or even quadrupling the share of renewable energy in the global energy mix by 2050 is a central part of the solution. IRENA's REmap 2030 shows that under current policies and national plans, average carbon dioxide (CO_2) emissions will only fall to 498 g/kWh by 2030, exceeding the limit of 450 ppm beyond which severe climate change is expected to occur. By contrast, if stakeholders double the share of renewable energy by 2030, global average emissions could be reduced to 349 g/kWh. Coupled with improvements in energy efficiency, this would be enough to avert disastrous climate change.

➔ A concerted effort of all stakeholders is required to accelerate transformation by fostering the advanced deployment of renewable energy. The will to pursue this path is increasingly evident. At the United Nations Secretary General's Climate Summit, over 100 global leaders and some 800 public sector and civil society representatives stressed their commitment to take the necessary action to stabilise the climate system, including through renewable energy financing, development

and deployment. With the landmark climate meeting in Paris less than a year away, the focus on renewable energy as an instrument for action will only increase.

- **Renewable energy is key to addressing energy poverty.** Energy poverty, faced by 1.3 billion people without electricity access and 2.6 billion who rely on traditional biomass for cooking and heating, is catalysing action to provide access to modern energy services to improve lives and stimulate economic growth. According to the World Bank, to achieve universal access to electricity by 2030, the pace of expansion needs to double – using both on-grid and off-grid solutions. The modular, scalable and decentralised nature of renewables means they can be adapted to local conditions and provide a broad range of energy services depending on the needs and purchasing power of end-users. Furthermore, there is growing evidence that off-grid renewables can increase household income and employment opportunities both in the energy supply chain and in downstream enterprises. IRENA estimates that attaining universal access to modern energy services by 2030 could create 4.5 million jobs in the off-grid renewables-based electricity sector alone.

➔ Renewable energy can have an immediate and transformative impact, and a growing number of examples from developing countries illustrate how renewable energy solutions can not only provide the energy poor with access to clean energy at an affordable price, but also stimulate economic development and social wellbeing. The business case for renewable energy in these settings is strong and is becoming a major potential for new market openings and investments.

- **Renewable energy has wider benefits.** There is growing evidence that renewable energy has a positive ripple effect throughout society, simultaneously advancing economic, social and environmental goals. A recent Japanese study, looking at a 2030 target of 14%-16% share of renewables, found the benefits were 2-3 times higher than the costs – including savings in fossil fuel imports, CO_2 emissions reductions and economic ripple effects. Spain's use of renewables avoided USD 2.8 billion of fossil fuel imports in 2010, while Germany saved USD 13.5 billion in 2012. For fossil fuel-exporting countries, deploying renewables at home makes more resources available for sale overseas.

➔ Employment remains one of the critical objectives for countries' growth strategies. Around the world, policy makers are pursuing renewable energy technologies not only for greater energy security or environmental considerations, but also for the socio-economic benefits they generate. The renewable energy sector has become a significant employer, with 6.5 million direct and indirect jobs in the renewable energy industry today (excluding hydropower) and the potential for millions of jobs worldwide in the coming years.

- **Renewable energy is yet to reach its potential**. While renewable energy has made remarkable strides to date, especially in the power sector, it is also evident that the share of renewables in the global energy mix will need to continue its growth if the challenges of energy security, climate change and energy access are to be addressed. This is particularly true for the non-power sectors where renewable energy technologies have tremendous potential, but are yet to make significant impact.

- **Renewable energy is mainstream in many countries' energy plans and strategies.** Some 140 countries have already set renewable energy targets, and almost 130 have policies in place to facilitate deployment. With growing concern over energy security, renewables are increasingly considered an integral part of broader strategies in this context. Investments have risen from USD 55 billion in 2004 to USD 214 billion in 2013. Furthermore, after a downturn in 2013, the latest BNEF records show that over USD 175 billion was invested in renewable energy power in the first nine months of 2014, a 16% increase compared to the same period last year.

7. The growing relevance of renewable energy is also reflected in IRENA's membership. At the fifth session of the Assembly, IRENA will have 139 Members, from 68 at the time of its establishment in 2011, with additional 32 at various stages of accession to membership. IRENA's growing membership

in the current socio-economic landscape conveys a compelling opportunity that will continue to drive the deployment of renewables worldwide in decades to come, as well as influence IRENA strategic and programmatic priories. It is therefore imperative to strike the right balance between the expectations and demands placed on the Agency and its limited resources.

III. IRENA's comparative advantage and programmatic activities

8. The foundations of IRENA's strategy and programmatic activities are embedded in its Statute. Article II of the Statute states that, "*The Agency shall promote the widespread and increased adoption and the sustainable use of all forms of renewable energy, taking into account:*

- *national and domestic priorities and benefits derived from a combined approach of renewable energy and energy efficiency measures, and*
- *the contribution of renewable energy to environmental preservation, through limiting pressure on natural resources and reducing deforestation, particularly tropical deforestation, desertification and biodiversity loss; to climate protection; to economic growth and social cohesion including poverty alleviation and sustainable development; to access to and security of energy supply; to regional development and to inter-generational responsibility."*

9. IRENA plays a unique role as the only international organisation dedicated solely to renewable energy. In delivering its programmatic activities, IRENA relies on its key strengths, including:

- Focused and unambiguous mandate;
- Broad membership base and strong Members' engagement in the work of the Agency;
- Access to key government partners;
- Direct and continuous engagement with countries at all levels;
- Increasing intellectual capital accumulated through programmatic work and interaction with countries;
- Growing credibility and authority based on substantive products;
- Leveraging partnerships for greater effectiveness and sustainability of effort; and
- Promotion of consultative, inclusive and participatory processes.

10. IRENA's programmatic activities are guided by the 2013-2017 MTS, which calls for the Agency to be, "*the global voice for renewable energy*" by serving as a centre of excellence for renewable energy; a renewable energy advisory resource for countries; and network hub of country, regional and global programs. The overarching vision of IRENA as the global voice for renewable energy is long-lasting, but the means by which this is achieved need to be adjusted over time, considering the dynamic nature of the field and the imperative to remain agile to respond to changing environments and needs.

11. The programmatic work spans from knowledge and advice products, through convening to enabling action. At present, IRENA concentrates its work programme on six thematic areas:

- Planning for the global energy transition;
- Gateway to knowledge on renewable energy;
- Enabling investment and growth;
- Renewable energy access for sustainable livelihoods;
- Islands: lighthouses for renewable energy deployment; and
- Regional action agenda.

12. In the course of the Council discussions on the renewable energy trends and drivers and the role IRENA should play, a number of strategic considerations emerged that would have an immediate impact on the next programming cycle, including:

- Climate change represents a major global challenge which requires solutions on many fronts. IRENA is an enabling instrument that should support countries with knowledge products and by seeking solutions through direct interaction with and assistance to countries.

- End-use sectors, accounting for some 60 percent of the global energy use, are central to energy transformation to a sustainable future. IRENA should therefore place a greater focus on renewable energy options and solution for heat, transport and industry.

- As the share of renewable energy grows in the global energy mix, system integration is becoming increasingly pertinent. IRENA's work to date, both in terms of technology developments and country needs, has indicated the importance that system integration will have in the future. Engagement with a wide range of stakeholders, including utilities and transmission system operators, is of the essence and IRENA should engage with such stakeholders in its future work on system transformation.

- Rural electrification is key to stimulating economic growth and alleviating poverty and there is an opportunity to design a new system based on the modular and decentralized nature of renewable energy. IRENA should actively take part in the global efforts in this respect by sharing best practice, developing analytic work and support countries in the rapid uptake of decentralized energy.

- Energy system transformation requires policy frameworks and market design that reflect today's realities and account for external costs that are drawing down development and economic growth. Thus, strengthening the business case for renewables remains a priority, including by contributing to the effort to correct the present market shortfalls in this context.

- The need for risk mitigation instruments and enabling policy frameworks remain vital elements of renewable energy deployment at scale, especially as investors are increasingly divesting from fossil fuels and looking for clean energy options. In addition, with climate finance instruments coming on-stream, the urgency for risk mitigation profile is even greater and IRENA should strengthen its ability to contribute in this context.

- Contextualizing renewable energy both within the broader energy sector and in different economic and social settings greatly assist in making the case for renewable energy. IRENA's work to date in this context has been effective but limited, and efforts should be made to expand it to the most impactful aspects. Finally, all programmatic efforts should be underpinned by strategic and targeted communications and outreach strategy.

13. In keeping with the imperative to remain flexible and adaptable, IRENA needs to be able to respond to new and emerging priorities. Importantly, IRENA is increasingly receiving requests from Members to provide in depth advice on technology and policy matters in specific settings at regional and country levels. This work strengthens IRENA's knowledge and competence, but also puts strain on resources. As the sector grows in size and scope, IRENA will have to strike a balance between two equally important roles for the Agency: that of a global thought leader and locus of knowledge on renewable energy, and the need to provide practical and direct support to countries in their efforts to accelerate

deployment of renewables. In this context, prioritisation will be essential, and qualitative evaluation of the Agency's work should guide the evolution of its programmatic work.

IV. Financing of the Agency

14. Stable, predictable financing is fundamental to IRENA's ability to deliver on an increasing number of programmatic requests. From the outset, it was evident that countries did not wish to create another large international organisation, but a focused Agency responding to the membership needs, with the necessary flexibility to adapt and adjust within a relatively short period of time. Countries also recognised the need for a critical mass of staff to provide stability and continuum to the Agency's work which, according to the IRENA Statute, are to be funded by the core budget. The Statute also provides for financing by voluntary contributions and '*other possible sources'*.

15. Members emphasised that the ambition for the Agency should remain high, but accompanied by innovative strategies for securing funding beyond the core budget. Currently, IRENA derives an increasingly large percentage of total budget from voluntary contributions. The amount of additional voluntary contributions and pledges for the current biennium have reached a record USD 12 million. In considering the opportunities for diversifying future funding, it is important to reflect on the implications of a growing membership base and related functions on the core budget.

a. Membership

16. In 2011, IRENA had 68 Members. At the onset of 2014, 124 Members were assessed for the IRENA budget. In the course of the year, and as outlined above, IRENA membership increased to 139. At present, 32 countries are in the process of accession, bringing the number of Members affiliated to IRENA to 171, getting close to universal membership. According to the UN scale of assessment, IRENA's current membership accounts for 88% of contributions compared to the universal membership. Based on the assumption that 33 states in accession would achieve full membership in the next biennium, this ratio would increase by 2% to 90%.

17. Trends to date have shown that, as the membership increases and the Agency matures, the number of requests to the Agency increases exponentially. For example, during the first nine months of 2014, some 210 requests were received, over 140 of which were requests for technical assistance and analytical support and advice. Therefore, it is prudent to assume that the workload for the Agency would significantly grow as the knowledge of available products and services increases and new countries join. It should be noted that, even with the assumption of universal membership, the impact on Members' assessed contributions will be marginal.

b. Staffing

18. In spite of the rapid growth in membership, IRENA's core staffing increased only modestly since its establishment.

Year	Number of Members	Number of Core Posts
2011	68	72
2012	84	72
2013	104	81
2014-2015	124[1]	89

[1] At the time of the fourth session of the Assembly. Since, the membership increased to 139.

19. While it is evident that the growing needs cannot be met through the core resources only, it is essential that the Agency possess sufficient core capacity to perform critical programmatic and administrative functions. Sound core infrastructure is positively correlated to the trust in all aspects of the institutional process, including governance and priority-setting; strategic and operational clarity; transparency in resource planning and allocation; sound management; accountability and administrative efficiency; and performance evaluation.

20. An in-depth review of the needs will be undertaken in the process of the development of the next work programme, but it is evident that some additional resources will be necessary to strengthen the core functions, as well as to increase non-core resources. Renewable energy global trends, coupled with IRENA's experience in the past four years and pattern in demand from Members indicate the programmatic areas that will require strengthening in the future. Furthermore, the Council discussions in the course of 2014 provided an added clarity on the Members' expectations as to where the Agency could augment its work. They also highlighted the importance of determining the areas that need to be funded by the core budget, and those that could be resourced, in part or fully, through voluntary or other contributions. Non-core contributions should amplify the agreed programme of work, but not become a driver in determining IRENA programmatic direction and strategy.

c. Operational considerations

21. Diversification of funding base will require resource mobilisation to become a key function of the Agency to enable the strategic policy and operational priorities to be implemented in a coherent, transparent, predictable and sustainable manner.

22. A key objective in considering the future funding options must be to secure a sustainable balance between core budget and voluntary contributions and other resources in a way that the needs for programme expansion and delivery capacity are adequately ensured. In this context, it should be noted that the UAE BID contribution of USD 5.8 million per annum for research and operations ends in 2015, which will have a significant impact on future programming. In addition, the core budget will have to account for routine changes, such as the inflation rate and adjustments to staff benefits and entitlements.

23. The preparation of the Work Programme of Budget for 2016-2017 should include a strategy for resource mobilisation that would identify the potentials and modalities for different sources of funding and in-kind contributions. The fundraising strategy should focus on three key elements: i) the establishment of a multi-year non-core funding framework and baseline; ii) possible funding mechanisms to sustain the delivery capacity of the Agency; and iii) the organisational aspects for the effective coordination of the fundraising functions.

24. IRENA should consider a diverse range of potential sources of funding and in-kind contributions with the overriding imperative of preserving the Agency's independence and impartiality. This could include:

- Donor governments (including at the local level),
- International intergovernmental funding entities,
- Non-governmental sources including private companies,
- Secondment of personnel,
- In-kind contribution of expertise,
- Other sources, such as independent foundations.

25. The resource mobilisation strategy should also consider the creation of partnerships that could contribute to the achievement of IRENA's objectives, where partners could engage in a joint action, but may or may not contribute funds. In particular, this should cover partnerships with national and local governments in programme countries, regional organisations, non-governmental organisations, private companies, independent foundations, and academic and research institutions. This should however be

accompanied with clarity in the concepts, benefits and limits of such partnerships and the assessment of resources required to realise their full potential.

V. Conclusion

26. The present report outlines the key elements that need to be taken into account in the development of the work programme and budget for 2016-2017 and in considering options for future funding, in light of recent discussions and guidance by the membership. It emphasizes the explicit link between resources and the Agency's ability to deliver its mandate. With the Agency's growth and maturity, programmatic priorities are emerging, but it is important to remain agile and able to quickly adjust to changes in the sector and a broader context. Further integration of performance metrics into the programmatic process to demonstrate and evaluate impact and validate programmatic direction would greatly assist in measuring the Agency's impact and in determining its future direction. In this context, diversification of IRENA's resource base, including by leveraging long-lasting and successful partnerships, will allow the Agency to deliver stronger impacts and results. The need to diversify IRENA's funding base is evident, as is the necessity to ensure sufficient and predictable core resources to enable the Agency to fulfill its mission in the fast changing renewable energy sector and with an expanding membership with increasing needs.