Charter of the
IRENA Renewable Costing Alliance

COSTS

Renewable Energy Costs, Technologies and Markets

MISSION

The mission of the Alliance is to:

- Ensure accurate, transparent, reliable and up-to-date data on the cost and performance of renewable technologies is available.

- Create a system for the systematic collection of cost and performance data for renewable technologies.

- Create at IRENA (a neutral and secure repository) a single, comprehensive database of real world renewable project costs and performance.

- Promote the dissemination and communication of the cost of renewables using transparent methodologies and anonymised, up-to-date project cost data from Alliance members and other sources.

- Promote more competitive markets and efficient policy-making for renewables, thereby creating a more sustainable framework for growth in renewable markets.

The IRENA Renewable Costing Alliance works at a technical level on data and its availability. To this end, all Alliance members agree to share with IRENA, confidentially, real-world project cost and performance data for the renewable energy projects they have access to.

Members of the Alliance share IRENA's objective of promoting the widespread and increased adoption and the sustainable use of all forms of renewable energy. Alliance members recognise that the lack of accurate, transparent and reliable data on the cost and performance of renewable technologies from reliable sources is a significant barrier to their accelerated uptake.

To reduce this information barrier, Costing Alliance members will work together to pool and share project cost and performance data. IRENA will act as the hub

for the Alliance and provide a secure, confidential database to store Alliance data and information.

This anonymised data, collected and securely stored by IRENA's Costing Alliance initiative and available to its members will represent a significant resource for use by Alliance members in their business, investment or communication activities in the renewable energy sector. Its use for analysis and dissemination will help to reduce uncertainty around current costs, promote more efficient and/or ambitious support policies for renewables, and assist investors in more accurately screening projects. Real, but anonymous, data and information from projects can then be used by all Alliance members, as well as by IRENA in its role as the global hub and voice for renewable energy, for comparative analysis and to communicate the true costs of renewables.

VISION

Alliance members, by pooling data on the costs and performance of renewables, are working together to ensure that accurate, transparent, reliable and up-to-date data is available on the cost and performance of renewable energy technologies. Alliance members believe that the availability of better and more complete cost data from real-world projects will allow higher-quality analysis to ensure better policymaking and communication about the costs and benefits of renewbales, and will also serve to stregthen the business case for renewables.

Our shared goal is to reduce uncertainty about the true current costs and cost trends in the renewable energy sector, in order to allow governments to establish stable and ambitious support policies, more accurately set support levels, and achieve the most efficient use of resources. Increased transparency will allow investors and consumers, by reducing search costs, to gain a better understanding of the most competitive renewable energy opportunities available to them.

STRUCTURE

The IRENA Renewables Costing Alliance is a technical working group and Alliance members must be in a position to share real-world project data. As such, the Alliance has three tiers of participation/engagement: Member Countries, Alliance Members and Observers.

• Member Countries: IRENA participating countries, including members or those in the process of becoming members of the Agency, can support the Costing Alliance by nominating a utility, research institution or other organisation with the appropriate mandate that is capable of providing real-world project data to join the Costing Alliance on behalf of the country.

• Alliance Members: Comprise utilities, project developers, research institutions, private companies, etc., that have access to real-world renewable project cost and performance data and agree to regularly provide this, confidentially, to IRENA to populate IRENA's Renewable Cost Database.

• Observers: Any organisation or individual committed to supporting the work of the Alliance in terms of data collection, analysis and communication about the true costs and benefits of renewables.

BACKGROUND

Rationale for the Alliance

Renewable energy technologies can help meet strategic goals for secure, reliable and affordable electricity. However, better and more up-to-date data is required.

Renewable energy is secure, reliable and increasingly affordable, contributes to improved electricity access, promotes development and reduces energy price volatility. However, without reliable information on the relative costs and benefits of the available renewable energy technologies, it is difficult for governments and investors to accurately assess which technologies are the most appropriate for their particular circumstances and what the support levels should be. Furthermore, a better understanding of local cost levels relative to other locations may provide guidance to policy makers on how to improve the enabling framework, in order to accelerate renewable energy deployment. The International Renewable Energy Agency (IRENA), therefore, is reaching out to those around the world with projects on the ground, in order to acquire and exchange the latest data on the costs and performance of renewable energy technologies in a wide range of conditions.

Objectives of the Alliance

The lack of accurate, reliable data on the cost and performance of renewable technologies is a significant barrier to their uptake. IRENA's cost analysis programme and publications to date are a response to this. However, the IRENA Renewable Cost Database, despite having 9,000 entries, currently only contains a small proportion of global renewable power projects, while detailed data on the cost breakdown and data on operations and maintenance costs are limited to a small proportion of the total.

Much more work, therefore, needs to be done to collect real project data, with a view to analysing emerging trends, highlighting the challenges facing investments in renewables and developing conducive policy environments for affordable renewable energy. The database also needs to be extended to transport and stationary applications.

ALLIANCE MEMBERS

Benefits

Alliance members will be kept involved in IRENA's costing analysis through an annual workshop and the quarterly newsletter. Alliance members will have access to IRENA analysts and also be invited to review IRENA's analysis and provide their input and expertise. Alliance members will be able to make detailed queries, but not view confidential unit entries, of IRENA's Renewable Cost Database through the IRENA website. Over time, as Costing Alliance member's share their data, this database will grow in size and be an increasingly useful benchmarking tool. If there is interest, working groups on specific topics may also be formed under the umbrella of the Costing Alliance in the future (e.g. on solar PV balance of system cost reduction potential).

Obligations

To be considered an active Alliance member and be provided with access to make detailed queries of the database, Alliance member's will have to provide data on the costs and performance of the real world renewable projects in their portfolio. IRENA will request data biannually for fast moving markets (solar PV and wind) and annually for other renewables, but Alliance members are encouraged to submit data as it becomes available if feasible, and also to submit revised data if ex-post costs differ from first submissions. The continued access to the detailed query system for the database will be dependent on the ongoing submission of data to the Alliance.

MEMBER COUNTRIES

Benefits

Member countries who join will be invited to provide feedback and guidance on what costing analysis would be most useful given the new data becoming available. At least once a year IRENA will organise a workshop around the major costing themes emerging from the work and Member countries who join the Alliance will be invited to attend. In addition, Member countries that join the Alliance will be sent a quarterly newsletter to update them on IRENA's recent costing work, which will include a special focus piece with relevance to costing (e.g. the growing share of O&M in the LCOE of wind), an article on how costing is an input to other areas of IRENA analysis, and an article from an Alliance member.

Obligations

Nominate a utility, research institution or other organisation that has been mandated and been provided the resources to join as an Alliance member and provide real world project data as an Alliance member.

OBSERVERS

Benefits

Observers will be kept involved in IRENA's costing analysis through the quarterly newsletter and through an invitation to the annual Alliance meeting if space remains after Alliance members have been given the option.

Obligations

None.

DATA CONFIDENTIALITY

IRENA's Renewable Costing Alliance is a voluntary initiative and therefore relies on the goodwill and co-operation of governments, research institutions, project developers, utilities, development banks, industry associations, etc. to contribute data to IRENA. The success of the Alliance therefore depends on the continued goodwill and co-operation of Alliance members.

Not all data that is submitted to IRENA by Alliance members will be in the public domain. IRENA is committed to fostering the generous co-operation offered by Alliance members by protecting the confidentiality of the information provided by members. To this end, the IRENA Renewable Confidentiality Agreement governs how IRENA will handle, store and protect the confidentiality of data.

IRENA commits to ensuring that confidential unit records are securely maintained, used only for statistical and analytical purposes by analysts of IRENA in their official duties and is not revealed in any outputs. Alliance members that query the IRENA Renewable Cost Database will only be able to view outputs that respect confidentiality of the data.

To achieve this, IRENA will supress or alter all data cells which are defined as likely to disclose identifiable information. Maintaining confidentiality will be achieved in two ways:

- Limiting the detail available (e.g. presenting regional results, not individual country results).

- Suppressing information (e.g. cell suppression for data).

Cell suppression in outputs (charts or tables) will occur when:

- Any data cell in the database contains three or less unit records, or

- For cells with 4-6 unit records, the cell will be suppressed when the share of n projects exceeds a specified share of the total k. The so-called (n,k) concentration rule.

It is important to note that in addition to the primary cell suppression, suppression will be applied to enough other cells in the particular table to ensure that the suppressed primary cell data cannot be derived by subtraction. This is known as secondary cell suppression, complementary or consequential cell suppression.

FREQUENTLY ASKED QUESTIONS

I have questions that are not covered in the Charter or Confidentiality Protocol?

Please contact IRENA to talk to the costing team about any issues that are not clear. Email costs@irena.org and we will get back to you rapidly.

How do you join the IRENA Renewable Costing Alliance?

As the Costing Alliance is a collection of organisations working together for mutual benefit, IRENA is striving to keep the administrative overhead of joining the Alliance as low as possible. All that is required to join is to send a letter (a template for use/modification is available at www.irena.org/costs) to the Director General of IRENA, Adnan Z. Amin, indicating your organisations' desire to join and acceptance of the principals laid out in the Charter and Confidentiality Protocol and the nomination of the working level contact with whom IRENA can engage with.

What happens after we send the letter indicating our desire to join the Alliance?

IRENA will contact the person in your organisation nominated in the joining letter within one week of IRENA's receipt of the letter to discuss the next steps. The costing team will discuss with you what data your organisation has available and in what format. IRENA will work with your contact to identify what data meets the criteria for inclusion in the database and assist you in filling out the data questionnaire. Data should be submitted within three months of IRENA contacting you on receipt of the joining letter. We understand that different organisations have data in different formats and locations and that this timeline may be challenging for some. IRENA is therefore happy to discuss with you a realistic timeline for data submission to ensure that the resource commitment by your organisation does not negatively affect the decision to join the Alliance. For instance, part of your portfolio of projects may be of high relevance to current analysis being undertaken by IRENA and these projects could be the base for a first batch of data submissions.

When can I access the IRENA Renewable Costs Database after I join?

As soon as we have received and verified the data for your projects, we will provide you with access to query the database.

Do we have to submit data for all of our projects in order to join the Alliance?

No, in order to keep the resource commitment by you for joining as low as possible we would ask for data from 2008, inclusive, onwards only. In addition, if certain projects in your portfolio since 2008 are problematic or would require disproportionate effort on your behalf to compile (e.g. several projects were developed under your old accounting system and would require research through your archives) then feel free to discuss this with the costing team as these may be excluded by mutual agreement.

How often will you ask for data updates?

We will ask for data updates 6 months after your first data submission for solar PV if any, given this market is moving more rapidly than others, and annually for the other renewable technologies. If you have no new projects since the last data request then no submission other than this fact is required.

What project costs do you require members to submit?

An example of the database fields can be found at www.irena.org/costs under the IRENA Renewable Costing Alliance page. We don't expect that this level of detail will be available for each project. The minimum data required to be included in the database are total installed capital costs, capacity factor and operations and maintenance costs. We also ask for efficiency and fuel costs for biomass. We are interested in collecting *ex ante* and *ex post* cost data to identify patterns or trends to inform our policy advice.

We have more detail available on the cost breakdown than in your database, what should we do?

If this is readily available, please talk to us about how to submit it to us. The data requirements for joining the Alliance are a compromise between sufficient detail to be useful and not so onerous to discourage membership. In the future, as we build up a working relationship with members we will have specific projects where we will reach out to members for more detailed cost data for analysis. This will allow us to make more in-depth policy recommendations. If we already have that data from when you join, it will significantly enhance the quality and relevance of the policy recommendations we make to our more than120 member countries.

Can't I just view the data without joining the Costing Alliance?

The general public will have limited access to the database, while members of the Costing Alliance will be able to make detailed queries to gain invaluable insights into the cost and performance of renewables around the world from our database of over 9,000 projects.

For more information visit IRENA online at **www.irena.org/costing**

For more information about the analysis of renewable-energy technology costs at IRENA, visit: **www.irena.org/costing**

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, hydro-power, ocean, solar and wind energy in the pursuit of sustainable development, energy access, energy security and low carbon economic growth and prosperity.

IRENA
International Renewable Energy Agency