



MINUTES

To: I-REC Standard Advisory Group
From: I-REC Standard secretariat
Date: March 22, 2017
Subject: Minutes Advisory Group Meeting from 22 March 2017, Amsterdam

List of participants

In order to participate an online registration was requested. All participants officially registered can be found in the annex. Participants that are not registered and that would like to receive the minutes of the meeting were requested to contact the secretariat in order to give contact details.

1. Opening and Agenda

The Chairman of the I-REC Standard board, Peter Niermeijer, opened the meeting and welcomed all participants. It was explained that the I-REC Standard board has requested RECS International, as the representative of all market players, to prepare and chair the Advisory Group meeting. It was explained that the I-REC Standard board believes the input from all stakeholders, and especially that of market players, is critical to bring the standard development to the next phase. It is the belief of the I-REC Standard board that the Advisory Group will be the location for market players to express their opinions and suggestions to improve the operation of the I-REC Standard attribute tracking system. The chairman of the I-REC Standard board requested that Jared Braslawsky takeover as chairman of the Advisory Group.

2. Terms of reference (TOR) I-REC Advisory Group

The chairman of the Advisory Group gave a more detailed explanation how the TOR may be structured. It was suggested that in the coming Advisory Group meeting these details be finalized and agreed upon by the participants.

2.1.1 Group details

Name:	I-REC Standard Advisory Group
Chairman of Advisory Group:	Jared Braslawsky
Reporting to:	I-REC Standard board

2.1.2 Background

The I-REC Standard board recognizes the need to be independent. However, it recognizes the importance of consulting stakeholders on the development and possible changes to the I-REC code, legal document. As a result, a mechanism is needed by which to seek input and filter information to the board through stakeholders so that a broad range of opinions could be gained prior to the board's discussion and decision. The best instrument to conduct this stakeholder outreach was determined to be an open Advisory Group. It was recognized however that while the Advisory Group is public there still may need to be public consultation of the code. This could be seen as three-levels of consultation: 1. the executive level via the I-REC Standard board, 2. the stakeholder level via the open I-REC Standard Advisory Group and 3. the public level via an open consultation. The purpose of the Advisory Group is to serve this second level of consultation.



2.1.3 Role of the Advisory Group

It is the role of the Advisory Group to provide stakeholder input in furthering the development of the I-REC Standard. Advisory Group members can suggest or request discussion topics for future meetings and may make recommendations on these topics which will be shared publicly and with the I-REC Standard board. Advisory Group members can suggest or request a topic for discussion by contacting the I-REC Standard secretariat.

2.1.4 Participants

The Advisory Group is open to all parties involved in the development of the I-REC Standard. Members are likely to be primarily commercial market players but NGOs, various national authorities, related associations as well as other involved parties are encouraged to participate as well.

Rules for membership were discussed but there was agreement that this should be quite open and flexible. Ideally there would be broad participation from different geographic regions and backgrounds, but this will take time to develop.

It was suggested that attendees that officially registered for the meeting (listed in the appendix to these minutes) are considered as being part of the I-REC Standard Advisory Group. Anyone not listed in the appendix who wishes to join the Advisory Group should inform the secretariat at secretariat@irecstandard.org.

2.1.5 Deliverables

The Advisory Group will have meetings and all issues discussed will be reflected in minutes. If needed the Advisory Group is free to draft memos covering issues of their concern.

2.1.6 Organizational setup / working process

The Advisory Group will have a meeting twice a year (most of the time in combination with the RECs Market Meeting, or RMM, in Europe and the Renewable Energy Markets, or REM, conference in the U.S.). Calls may be organized between these meetings as necessary.

Agendas for these meetings will be prepared and distributed prior to the meeting.

2.1.7 Planning

2 to a maximum of 4 conference calls per year are foreseen. 1-2 physical meetings (one during RMM and one during REM) are planned.

2.1.8 Discussion

Some participants expressed concern related to the fact that market players were in the board. This was discussed at length by the participants and a number of points were made:

- The board as well as the secretariat recognize that some stakeholders are concerned that market players serve on the I-REC Standard board. The belief is that these market players have extra influence over the development of the Standard which could provide an unfair advantage. The secretariat assured the Advisory Group that the board generally does not have access to information that is not available to market players who specifically request this information. The only area where certain board members may have a market advantage due to early insights is in the review of country reports where certificate issuance is requested for the first time.
- The secretariat acknowledged the concerns of stakeholders who have raised this issue, but stated that the secretariat and the board are willing to consider different members for the board only if additional well qualified individuals can be found to replace the market players. The secretariat and the board are not willing to sacrifice good discussions in the board for the sole purpose of removing market players from the board.



- It was suggested that local issuers could be part of the board but this must be considered in more detail. While the chairman of the Advisory Group expressed support for local issuers having an influential role in the market it could be against the interest of market players to have them represented in the board. It could be imagined that a local issuer delivering poor services would be able to protect their position as local issuer due to their role in the board.
- Some Advisory Group members said they would suggest individuals that could be vetted for a board position.

There was general agreement on the TOR for the Advisory Group. It was suggested that the TOR be defined clearly in a memo and shared with the Advisory Group at a coming meeting.

3. Review of the I-REC Code

The following elements related to the structure of I-REC were reviewed in detail:

- The I-REC Standard, a Dutch Foundation, is in control of the I-REC Code and associated documents. The I-REC Standard also authorizes local issuers to conduct work in a specific country or region.
- I-REC Services is a limited company that is under contract to the I-REC Standard. I-REC Services handles all legal and contractual relations related to the use of the I-REC Standard attribute tracking system. I-REC Services has a legal relation with I-REC Standard, issuers and participants. I-REC Services outsources for a global Registry (to save costs) that is operated under the responsibility of I-REC Standard.
- The issuer operates in a specific country and devices are registered with the issuer at the request of a registrant. Following device registration the registrant can request certificate issuance which is also authorized by the issuer.
- More detailed information is to be found on the I-REC website and particularly the I-REC Guide.

3.1 Market Player roles within the I-REC Standard

The I-REC Standard links producers of electricity to consumers of electricity. This link is seen in the structure of the system and the types of positions or roles market players can assume. Device owners frequently work through a third-party when interacting with the I-REC Standard. The party representing the device owner is known as the **registrant**. Consumers also generally interact with the I-REC market and redeem I-REC certificates through a third-party. The party representing the consumer is known as the **participant**. These two roles were described in detail during the meeting.

Role of the registrant:

A registrant is the only entity that is able to request device registration or certificate issuance. They can do this on behalf of a device owner or on their own behalf (if they themselves are device owners). The registrant has direct contact with the issuer authorized to conduct issuance in a specific country/region. When/if the issuer approves the device registration, the registrant can request certificate issuance. To request certificate issuance the registrant will choose their device and request issuance for a specific period. The registrant must always request I-RECs be issued into the account (trade account) of a participant. The registrant can also be a participant but this could also be a third-party. Registration as a registrant is free.

Role of the participant:

The participant is the market player, trader or potentially a consumer with an account in the I-REC Standard attribute tracking system. They work to redeem certificates on behalf of their clients and can trade certificates from their primary account to the primary account of another market player.



The participant has three main account types, 1. Primary account, 2. Sub-account and 3. Redemption accounts. In general participants have one Primary account and an unlimited number of sub accounts and redemption accounts. Registration as a participant has associated fees.

3.2 Overview of all relevant legal document

An overview of the most relevant legal documents was presented:

- I-REC Code self, includes the definitions
- Standard Terms & Conditions Participant
- Standard Terms & Conditions Registrant
- Owners declaration
- Local Issuer Agreement

3.3 Why is review needed?

The I-REC Code was for the first time published beginning 2015. In that year the I-REC Standard authorized the Central Issuer for a couple of countries. Especially the first year the secretariat encountered a number of issues that required some reformulation in the code. The procedures for change requests were also tested.

Apart from that, the secretariat has determined that the whole structure of legal documents needs some improvement. All the legal documents, including the code, should be using a single set of definitions. In addition, the various documents should be more clearly connected. It is the view of the secretariat that a proper legal framework in the code will help ensure reliable attribute transfers.

3.4 How is review organized?

The I-REC Standard has retained a legal advisor to work on a draft version. The secretariat will provide comments on this draft. A revised draft will then be available for review, discussion and comment in the Advisory Group. In the end it is up to the I-REC Standard board to make the changes in the I-REC Code and associated documents.

3.5 Discussion

A few market players suggested that market boundaries should be regulated in the code. This was not agreed upon by other Advisory Group members as they do not believe it is the role of the standard to determine market boundaries. The Advisory Group suggested that this could be an appropriate role for RECS International, as part of the planned Renewables Good Practice.

4. Country developments

The country developments will be a regular item on the agenda of the Advisory Group.

4.1 Authorization issuers

The board authorizes issuers to conduct device registration and issuance in a country. In general there are three types of issuers: (1) governmental body, (2) local and non-governmental and (3) non-local UK-based central issuer. Issuer authorization is always on the basis of a country report prepared by market players and/or local stakeholders. Writing a country report is a joint effort of all parties involved (reviewed by the secretariat and the board). All parties involved in the development of a country or regional market can form a 'national I-REC team'.

4.2 Chinese national team

As a test, the secretariat started the Chinese national team to coordinate information. The team was created in response to a number of documents released by the Chinese government explaining the details of the coming Chinese REC scheme. The national team was announced to market players (participants and registrants) and was open for all individuals to join.



4.3 Discussion

The Chinese national team started a discussion among Advisory Group participants:

- There was support for the development of the team but there was some concern about the lack of structure in the team.
- It was suggested that national team members should be named on the website of the I-REC Standard.
- While generally the national team is open, there should be some level of discretion on who can join the group. For the time being it was suggested that the secretariat provide some guidance on this aspect.
- In addition it was suggested that the national teams should have deliverables and/or a leader pushing the group. The secretariat suggested that prior to the next Advisory Group, Advisory Group members support the secretariat and come up with a plan of action for the national teams.
- In general there was support for the Chinese national team and a suggestion that this model could be replicated in other countries or regions.

4.4 Country developments

A list of authorized issuance countries can be seen online. There are a total of 17 countries where issuers are authorized to conduct work at this point in time. A few of the relevant developments are seen below:

4.4.1 UAE

The I-REC market is under development and a Dubai Carbon Centre of Excellence (DCCE) is authorized by the I-REC board to become a local issuer. This is a special case since the national authorities have written a letter saying that DCCE is the only organization that is allowed to issue RECs and that it is their advise that the national I-REC Standard should be used.

4.4.2 Brazil

Market development led by Instituto Totum, local issuer. Some I-RECs are also eligible for the sustainability label the REC-Brazil.

4.4.3 China

Currently limited to state-owned production devices. Clarifications related to the developments of the Chinese REC system need to be determined.

4.4.4 Guatemala

Recently (20-3-2017) the I-REC Standard board authorized the central issuer to conduct issuer services in the country.

4.5 Discussion

There was some discussion related to the country developments. The first question was whether I-REC can provide a guarantee that they will issue I-RECs in the future for a certain country or region?

- The chairman of the Advisory Group responded that the I-REC Standard can only provide guarantees as they are stated in the I-REC Code. For example, if a country outlawed all voluntary REC certificates the I-REC Standard, as per the code, would be required to halt issuance in the country.
- The Advisory Group agreed with this determination and suggested that market players should include Force Majeure provisions in their contracts to ensure that they and their clients are protected.

Another discussion topic was related to the authorization of new issuers in countries or regions. Some stakeholders would like this information to be released in a way that all market players are informed



at the same time. The secretariat suggested that the best way to do this would be via the coming I-REC Standard newsletter.

5. Transparency and publically available information

The I-REC Standard board is releasing public statistics for the 2016 calendar year. In that year there was the following activity within the I-REC Standard market.

Volume issued

- 1.725.980 certificates were issued in 2016

Volume redeemed

- 1.188.327 certificates were redeemed in 2016

Number of Participants/Registrants

- There are 16 registered registrants
- There are 14 registered participants

Number of devices registered

- There are 47 registered devices in 2016
- There are 69 total registered devices on the system as of 1-1-2017

5.1 Transparency in public information

The Advisory Group was requested to consider what information should be made publically available. The secretariat must balance the needs for private market information while also allowing sufficient public information for market development.

5.1.1 *Registrant connected to the production device*

Some registrants have requested that their name be shown on the I-REC registry next to the public list of devices. The Advisory Group agreed that registrants are free to advertise which devices they have registered on the registry but it is not the role of the standard to release this information on their behalf.

5.1.2 *Future functionality*

As part of the improvements being done to the registry the I-REC Standard will allow redemption accounts to be made public. This function will allow participants to have the option to make RECs redeemed in individual redemption accounts be seen publically. This will satisfy the needs of some environmental labels and consumers wishing to have publically available information on the redemption of certificates adhering to their standards.

6. General discussion

The chairman of the Advisory Group suggested that the secretariat prepare, together with the board, specific information for the next Advisory Group meeting. This includes information related to the Terms of Reference, national teams and publically available information. The secretariat also suggested that Advisory Group members suggest topics for the coming meeting by contacting the secretariat directly.

7. Closing

The Advisory Group thanked the I-REC Standard board and the secretariat for hard work and efforts in developing the I-REC Standard market.



Appendix – Members of the Advisory Group as of March 22, 2017

Below is a list of persons who pre-registered for the Advisory Group Meeting of March 22, 2017. It does not reflect the actual attendees of the meeting. The I-REC Standard considers that anyone who has registered for a meeting of the Advisory Group is automatically a member of the Advisory Group until further notice is given to the I-REC Standard secretariat. Therefore, if your name is not on the list and you wish to be added, please inform the secretariat at secretariat@irecstandard.org. If your name is on this list, you need not take any further action.

Organisation

ECOHZ
ECOHZ
ECOHZ
CRX CarbonBank Pte Ltd
(Non-member observer) Center for Resource
Solutions
Fortum
Kyoto Energy Pte Ltd
ACT Commodities BV
ICAP Energy AS
Gold China Consultancy International Co.
(GCCCI)
Fortum Power & Heat Oy
Agder Energi Vannkraft AS
First Climate Markets AG
South Pole Group
Statkraft Markets B.V.
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Aron Simon
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Mr. Roger Ruttze
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