The maturing renewables market



1	Introduction	2
2	Our mission	4
3	Market developments	7
4	Financial developments	14
5	Our organization	17

1 Introduction by Thomas Eccard, Chair of the board

The maturing renewables market

In years to come we will look back on 2019 as the start of a new era for the energy transition.

At the very end of 2018, the final version of the Renewable Energy Directive (RED-2) came into force. This important legislation included Article 19 on Guarantees of Origin, which extended their use from renewable electricity markets to other renewableenergy carriers such as hydrogen and biomethane, thus facilitating integration with other energy markets and promoting sector coupling. At the same time, the Article requires further harmonisation of GO market rules and systems across Europe's internal market countries. These countries have until July 2021 to implement RED-2, which includes a requirement for national competent authorities to ensure that their legislation complies with the European standard on GOs (CEN EN 16325). This standard started a process of revision in

2019 that should further increase harmonisation in Europe and provide a significant boost to the market and the development and operation of renewable energy generation.

Almost 12 months later - at the end of 2019 - the European Commission adopted a proposal on the European Green Deal, which stated that the EU would aim for net zero carbon emissions by 2050 and a significant improvement in the EU's 2030 greenhouse gas emissions reduction target (from -40% to -55%, compared to levels in 1990). Achieving the new 2030 targets will require substantial efforts, both in terms of energy efficiency and increasing the use of renewable energy. As a non-profit foundation representing electricity market players, we at RECS International are committed to creating open, transparent markets that can accelerate the energy transition by boosting demand for renewable energy.

1	Introduction	2
2	Our mission	4
3	Market developments	7
4	Financial developments	14
5	Our organization	17

1 Introduction by Thomas Eccard, Chair of the board

The maturing renewables market

Overall, the growth trend in REC and GO markets for electricity in Europe and internationally remained strong in 2019, and the board and secretariat of RECS International are committed to supporting that continued growth.

To achieve this, we are also growing ourselves as an organisation. 2019 saw the first full year of work for the organisation's new Director, Adam White. By the end of the year, the secretariat was extended with the addition of a new junior analyst, Jos Tuinenburg and the board has also grown, too, with the inclusion of Filip Strohwasser with ČEZ (Czech Republic) as an observer. Filip brings valuable knowledge and insight to the board, thanks to his experience working for a major utility based in a Central European Member State. In line with regulatory and market developments, our board has also started a process to review and amend the strategy of RECS

International, which has also led to the adoption of a new long-term work programme for our secretariat.

At RECS International we will continue to work hard to build on what we started in 2019 and we are looking forward to a bright future for renewable energy markets.

1	Introduction	2
2	Our mission	4
3	Market developments	7
4	Financial developments	14
5	Our organization	17

Our mission

RECS International is a non-profit foundation that represents electricity market players. Working with our membership of over 85 organisations from more than 20 countries, we strive to create an open and transparent demand-driven renewable-energy market

that is facilitated by commonly accepted and harmonised tracking systems.

By engaging with legislators, policymakers, regulators and system operators, RECS International makes the case that effective

renewable-energy markets can help to accelerate the energy transition and thus make an important contribution to tackling climate change.



1	Introduction	2
2	Our mission	4
3	Market developments	7
4	Financial developments	14
5	Our organization	17

2 Our mission

RECS International work areas

The work of the RECS International secretariat and board covers four main areas (see Figure 1). The top half of the circle represents the work we do to maintain our connection with our members as well as the wider renewable-energy market, through events, member services, communications and coordination with other organisations. The lower half of the circle represents the role of RECS International as 'thought leaders' in the development of renewable-energy markets. This aspect of the organisation's work is shown in more detail in Figure 2.

Member services **Communications** & coordination & events INTERNATIONAL Regulatory affairs & maximising Disclosure & internationalisation impact

Figure 1. RECS International work areas

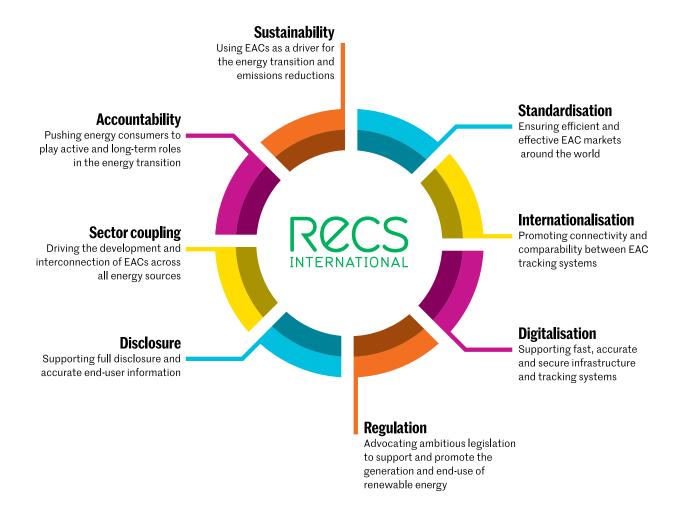
1	Introduction	2
2	Our mission	4
3	Market developments	7
4	Financial developments	14
5	Our organization	17

2 Our mission

RECS International's vision and mission

To support the effective and reliable consumption of renewable energy, RECS International provides guidance and information on key aspects of the development of renewable-energy markets. Figure 2 sets out our vision in eight key areas where we believe we are thought leaders. Papers on each of these areas are available on the www.recs.org website, with RECS International members receiving priority access.

Figure 2. RECS International's areas of focus



1	Introduction	2
2	Our mission	4
3	Market developments	7
4	Financial developments	14
5	Our organization	17

Market developments

Overview

Europe

USA

International Renewable Energy Certification



1	Introduction	2
2	Our mission	4
3	Market developments	7
	→ Europe	8
	\rightarrow USA	10
	ightarrow International Renewable	
	Energy Certification	12
4	Financial developments	14
5	Our organization	17

3 Market developments

Europe

The EU's modified Renewable Energy Directive (RED-2) came into force in the final days of 2018 and Member States have until mid-2021 to implement it. This made 2019 an important year for developing national regulations that meet the requirements of the new Directive, including those relating to Guarantees of Origin.

RECS International supports the successful incorporation of RED-2 into national law throughout Europe and has provided analysis and guidance to Member States in

2019 (www.recs.org/documents). This activity was supported by organising workshops in Paris, Prague, and Amsterdam.



1	Introduction	2
2	Our mission	4
3	Market developments	7
	→ Europe	8
	\rightarrow USA	10
	ightarrow International Renewable	
	Energy Certification	12
4	Financial developments	14
5	Our organization	17

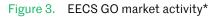
3 Market developments

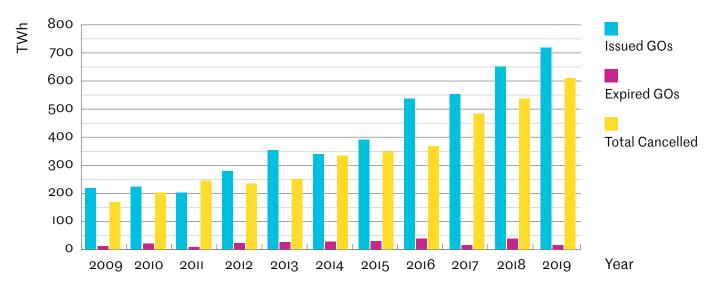
Europe

Figure 3 (Source: The Association of Issuing Bodies) shows how the European Energy Certificate System (EECS) segment of the European GO market for renewable energy has grown consistently for more than a decade. At RECS International we firmly

believe that the use of GOs in Europe will continue to grow as this well-established market develops further, not least thanks to the fact that the European standard on GOs has been updated. This should be fully revised by mid-2021 and that will make the

market more efficient and easier to use, thanks to greater harmonisation between EU Member States.





*Source: The Association of Issuing Bodies

1	Introduction	2
2	Our mission	3
3	Market developments	6
	→ Europe	7
	\rightarrow USA	9
	ightarrow International Renewable	
	Energy Certification	11
4	Financial developments	13
5	Organization	16

3 Market developments

USA

In the US REC market growth has continued steadily, as in previous years. The growth is clearly visible in all aspects of the market: from voluntary procurement – led by enduser demand for renewables – to compliance growth, because of state consumption requirements related to the Renewable

Portfolio Standard (RPS). Unlike with the renewable electricity targets in Europe, the US has imposed consumption targets on suppliers (utility companies), for which they are obliged to use a minimum number of RECs. In Europe, the targets are largely based on national generation of RE

compared to overall national electricity consumption. That said, there is no such thing as a 'compliance REC' in the US. There is a single instrument, the REC, which can be used for both for compliance and for voluntary purposes.



1	Introduction	2
2	Our mission	3
3	Market developments	6
	→ Europe	7
	\rightarrow USA	9
	ightarrow International Renewable	
	Energy Certification	11
4	Financial developments	13
5	Organization	16

3 Market developments

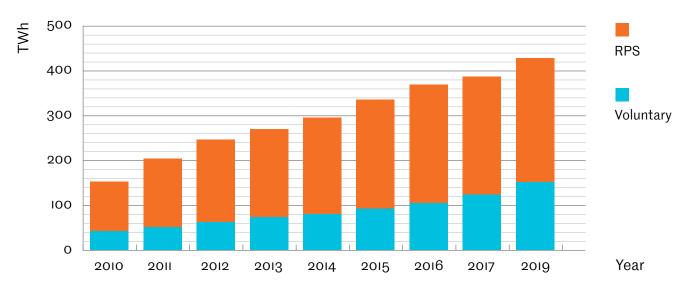
USA

Data on US REC sales from voluntary and RPS sales are available up until 2018. Figure 4 shows continuing growth of both voluntary and compliance REC sales. In 2018, 381 TWh of electricity were documented by RECs. Total REC sales grew by 10.7% from 2017 to 2018. From 2010 until

2018 REC sales grew on average by 14% per annum. RPS-compliant RECs have been responsible for most sales since 2010. In 2018, 35% of REC sales were made on a voluntary basis and the share of voluntary sales has remained roughly one third throughout this period. From 2010–2018,

RPS-compliant REC growth increased on average by 13% annually, while the average growth rate of voluntary REC sales was 17%.





*Source: National Renewable Energy Laboratory (NREL) and Lawrence Berkeley National Lab)

1	Introduction	2
2	Our mission	3
3	Market developments	6
	→ Europe	7
	\rightarrow USA	9
	→ International Renewable	
	Energy Certification	11
4	Financial developments	13
5	Our organization	16

3 Market developments

International Renewable Energy Certification

The International REC Standard Foundation (I-REC Standard) is a non-profit organization that provides a robust attribute-tracking standard for use around the world. This standard requires local stakeholders and government authorities to facilitate national implementation of RECs while adhering to

local or national regulations. Based on the I-REC Standard codes and associated documents, which are the blueprints for the attribute-tracking standard, I-REC local issuers are able to implement robust and transparent attribute-tracking systems, ensuring the highest quality and adherence

to best practices. These include avoiding double counting, double certificate issuance, and double attribute claiming.



1	Introduction	2
2	Our mission	3
3	Market developments	6
	→ Europe	7
	\rightarrow USA	9
	→ International Renewable	
	Energy Certification	11
4	Financial developments	13
5	Our organization	16

3 Market developments

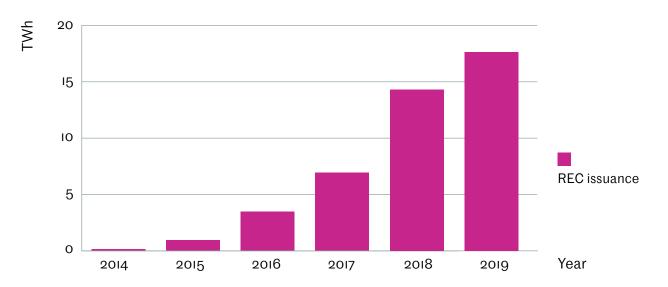
International Renewable Energy Certification

In each country or region, the I-REC Standard Foundation must authorize an issuer to facilitate the implementation of the I-REC Standard code in that country. Without issuer authorisation for a specific country or region it is not possible to issue I-RECs for production devices in that

country or region. It is the explicit goal of the Foundation that all issuers should be local and/or governmental authorities. As of the date of publication, there were more than ten local organisations working as national issuers. They work directly with local stakeholders to ensure reliable and local implementation of the internationally accepted standard.

The use of RECs which adhere to the I-REC Standard continues to grow. Due to COVID-19 the residual mix deadline was extended for I-REC Standard-adherent REC markets from 15 May to 15 August 2020. As a result, 2019 production can still receive a certificate until 15 August this year. At the time of publication, there was a ~20% increase in certificate issuance from 2018 to 2019. www.irecstandard.org

Figure 5. Global REC issuance that adheres to the I-REC Standard (TWh)*



^{*}Source: International REC Standard Foundation

1	Introduction	2
2	Our mission	4
3	Market developments	7
4	Financial developments	14
5	Our organization	17

Financial developments

Overview

Balance sheet

Profit and Loss statement



1	Introduction	2
2	Our mission	4
3	Market developments	7
4	Financial developments	14
	→ Balance sheet→ Profit and loss statement	15 16
5	Our organization	17

4 Financial developments

Balance sheet

Assets In Euros

	2019	2018
Assets	399	2,791
Accounts receivable	10,633	10,579
Cash	313,764	260,170
Other receivables	31,357	34,503
Total	356,153	308,043

Liabilities In Euros

	2019	2018
Cumulative results	233,443	195,711
Creditors	3,906	1,601
Other creditors	118,804	110,731
Total	356,153	308,043

1	Introduction	2
2	Our mission	3
3	Market developments	6
4	Financial developments	13
	→ Balance sheet	14
	\rightarrow Profit and Loss statement	15
5	Our organization	16

4 Financial developments

Profit and Loss statement

Revenue In Euros

	2019	2018
Member fees Meeting fees	177,145 374,027	165,141 300,823
Total	551,172	465,964

Expenditure In Euros

	2019	2018
Internal		
Secretariat	236,272	211,728
Travel & accommodation	20,698	10,260
Financial & legal	11,952	6,030
Operational costs	8499	6,356
Meetings	203,635	191,630
PR & communication	7,489	15,369
Special projects	24,895	11,969
Result	37,732	12,622
Total	551,172	465,964

5	Our organization	17
4	Financial developments	14
3	Market developments	7
2	Our mission	4
1	Introduction	2

Organisation

Overview

RECS International secretariat

RECS International board members

RECS International members



1	Introduction	2
2	Our mission	4
3	Market developments	7
4	Financial developments	14
5	Our organization	17
	→ RECS International secretariat	18
	ightarrow RECS International board	18
	→ RECS International members	19

5 Organisation

Secretariat

Jared Braslawsky Secretary-General

Adam White Director

Mirte van Geenen Project manager

Jos Tuinenburg Junior analyst

Ineke ter Steeg
Accountant

Board members

Thomas Eccard

Chairman/President Entelios (a part of Agder Energi), Sweden

Marie-Christine Bluett

South Pole Group, the Netherlands

Oliver Crouch

Natural Capital Partners, United Kingdom

Ivan Debay

Origo, France

Eva Klesse

Klimalnvest Green Concepts, Germany

Tom Lindberg

Ecohz, Norway

Louis von Moos

Association ECS, Switzerland

Saptarshi Pal

Statkraft Markets, United Kingdom

Dania Piccioli

Nvalue, Switzerland

Filip Strohwasser

Board observer

ČEZ Group, Czech Republic

1	Introduction	2
2	Our mission	3
3	Market developments	6
4	Financial developments	13
5	Our organization	16
	→ RECS International secretariat	17
	ightarrow RECS International board	17
	→ RECS International members	18

5 Organisation

Members in 2019





















































































L	Introduction	2
2	Our mission	3
3	Market developments	6
1	Financial developments	13
5	Our organization	16
	→ RECS International secretariat	17
	ightarrow RECS International board	17
	→ RECS International members	18

5 Organisation

Members in 2019













































































RECS International

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