

# Markets continue to drive growth in renewables



Shaping an effective renewable electricity market

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## 1 Introduction

# Markets continue to drive growth in renewables

**The past year was a pivotal period for renewable energy in general, and for Guarantees of Origin (GOs) in particular. In 2018, for the first time, Europe surpassed 650 TWh of GO-backed electricity issued, evidencing that consumer demand for renewable power, as established through GOs, continues to grow. An estimated billion euro plus market can now be seen on the horizon as the decarbonisation path towards 2030 relies on the expansion of renewable electricity to well beyond half of all European power generation. Around the world, too, the use of energy attribute certificates (EACs) continues to increase, with many new countries adopting the I-REC Standard. At the same time, the US market for RECs continues to forge ahead.**

In Europe, the EU's political leaders joined power consumers in strengthening their support for the European Electricity Certificates System (EECS) – and the GOs it manages – with legislation. The recast Renewable Energy Directive both expands European GOs to cover

all forms of renewable energy and requires their use to prove the volume or proportion of renewables in users' energy mix.

Looking ahead, the baton will now be passed to EU Member States, who are tasked with implementing the Directive. RECS International, working with other key stakeholders, is calling for the implementation of Article 19 on GOs to observe the following three key principles in relation to electricity:

1. Achieving a system that is ever more harmonised and standardised, with each EU Member State following the EECS standard and having a representative on the AIB;
2. Using GOs as an information tool first and foremost, and therefore issuing them for all forms of renewable electricity production, including that generated by publicly supported power plants or by power purchase agreements (PPAs);
3. Accelerating the move towards the mandatory full disclosure of all forms of electricity production to consumers.

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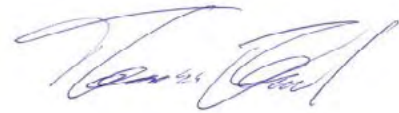
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## 1 Introduction

As the costs of renewable electricity generation technologies continue to fall rapidly around the globe – and renewables start to outcompete fossil fuels on economic grounds alone – there will be less need to bring renewables onto the market through public subsidies. EACs, including the European GOs and the EECS standard, are set to be the backbone of this urgent and significant transformation, with greater value for producers, suppliers, consumers and the general public.

Providing consumers with reliably traceable renewable energy is the future, and RECS International is at the forefront of making that happen. The year 2019 will be a year of transition for our association as we further develop our work programme and refine our long-term strategy to meet the needs of our members in the years to come.

*On behalf of the Board of RECS International*



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## 2

# Our Mission

RECS International is a non-profit members' organisation with the mission to create transparent and reliable renewable energy markets, facilitated by commonly accepted energy attribute tracking systems.

Members of RECS International represent the full chain of the electricity market – from producers to consumers – who all endorse the principles of cost-efficient, consumer-driven growth in renewable electricity.

At RECS International we believe that a sustainable, renewable future of the electricity market will be driven by consumers. Energy attribute certificates (EACs), suitable policies and best practices must be in place to ensure the fastest possible bottom-up growth in that market.



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3

# Market developments

## Overview

Europe

USA

International Renewable Energy Certification



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## 3 Market developments

# Renewable energy consumption in Europe

After a slight dip in cancellations of European guarantees of origin from 2015 to 2016, the market bounced back strongly in 2018. For the first time, more than 700 terawatt hours was cancelled in a year (for comparison, this is more than the gross electricity generation in Germany). This growth is expected to accelerate further as a result of the agreement of a new EU Renewable Energy Directive, which considerably strengthens the framework for GOs and extends their use to other renewable energy sources. To maximise the current positive momentum, it is crucial that EU Member States implement the new law effectively, with as much standardisation and harmonisation as possible.

RECS International has therefore issued detailed implementation guidance for the new Directive's Article 19 on guarantees of origin: available [here](#) or via our website [www.recs.org](http://www.recs.org).

In the figure on the next page the vertical bars show annual levels of RES production, part of which has been certified with GOs ("issued"), some of which has not been certified due to production being coupled to a support scheme which does not allow the GOs to reach the market ("supported") and some of which has been available for certification but has not been certified ("available"). The line shows the trend in cancellation volumes of GOs (certified RES consumption). Issuance of GOs increased by 74 TWh (10%) in 2018 (compared to 2017) and the cancellation/use of those GOs grew at a similar rate.

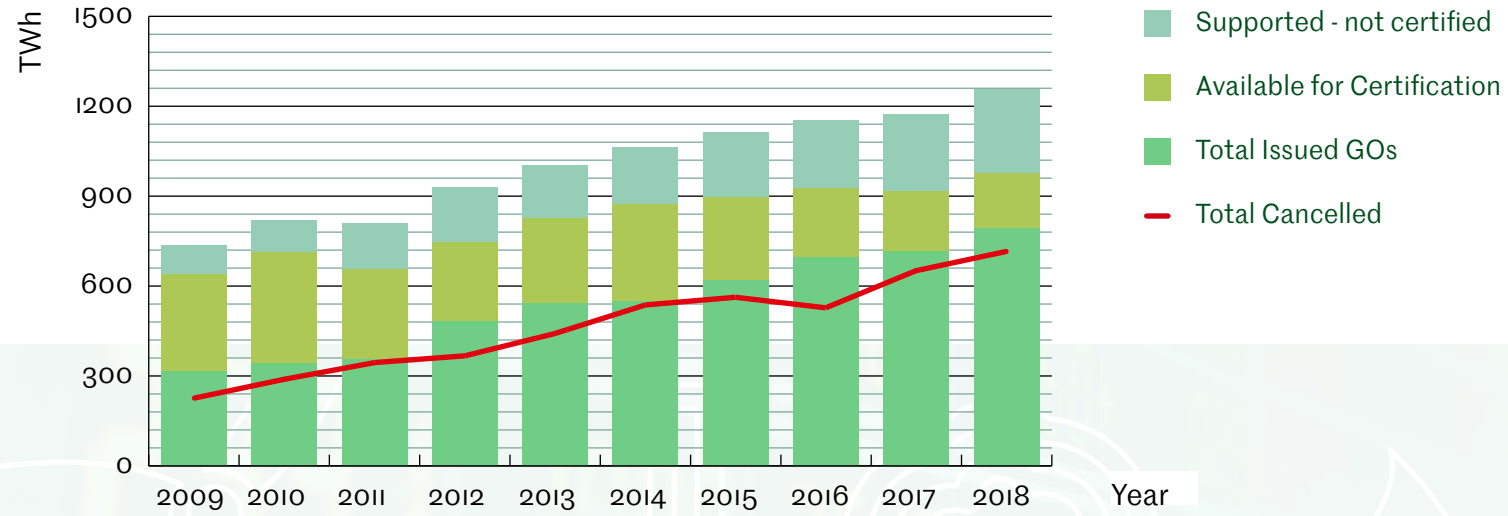
(figure)

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## 3 Market developments

# RES consumption Europe\*



\*Source: GO Monitoring RECS International

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## 3 Market developments

# REC markets in the US

Whereas the EU issues guarantees of origin (GOs), in the USA there are Renewable Energy Certificates (RECs). In each jurisdiction renewable electricity producers receive a REC for every MWh of power they generate. However, there are important differences between the two systems.

In the EU, renewable energy targets are based on power production within each country, while consumption of renewable energy is entirely voluntary. In some US states, there are no targets and renewable energy is both produced and consumed on a voluntary basis. In other states, however, targets are based on the consumption of a minimum level of renewable power, set by the Renewable Portfolio Standards (RPS) by regulated entities and which can be exceeded on a voluntary basis. The same REC instrument is used for both markets (compliance and voluntary).

The figure on the next page details the use of each type of renewable energy consumption in the US. Growth of almost 16% from 2016 to 2017 pushed overall consumption above 400 TWh for the first time. The trend in 2015-16, when voluntary demand grew more quickly than compliance markets, continues, with voluntary consumption growing 27% compared to compliance consumption (there was 6% growth for new renewables and 3% for existing renewables). In absolute terms, the consumption of new renewables under compliance schemes continues to dominate, with 154 TWh of power representing 36% of all consumption – showing that RPS-driven markets continue to support the expansion of renewable power consumption. The proportion of ‘Other renewables’ relates to consumption by regulated entities over and above their RPS requirements as well as distributed generation where there has been no REC transaction (e.g. rooftop PV owners retaining their RECs).

(figure)

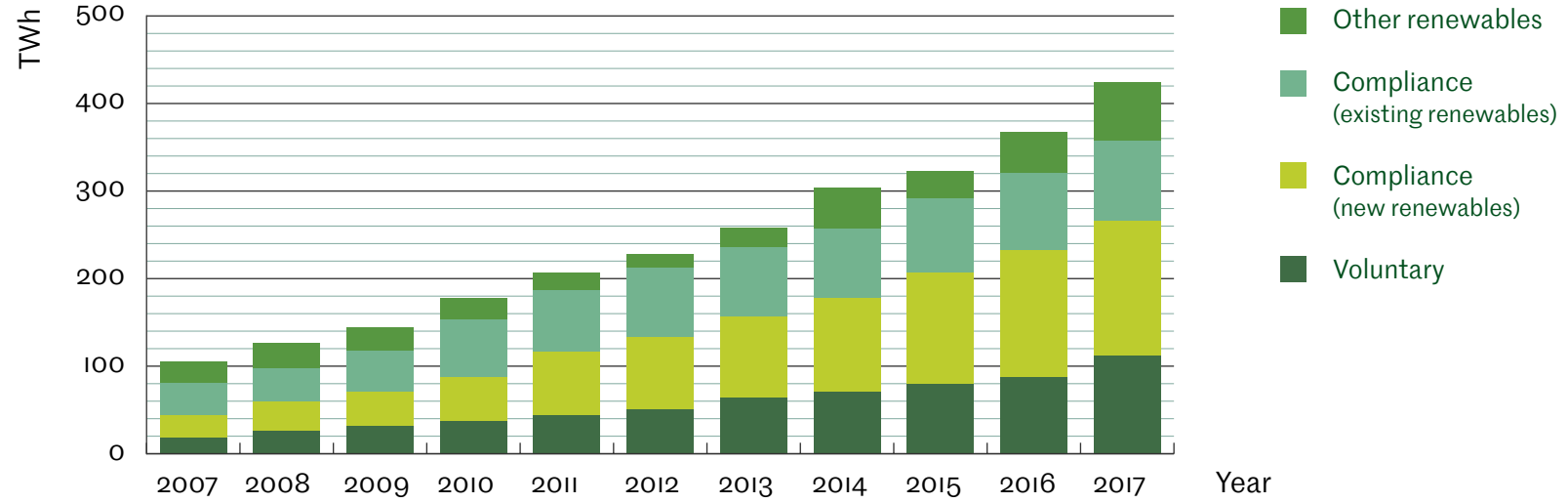


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## 3 Market developments

# RES consumption USA\*



\*Source: NREL

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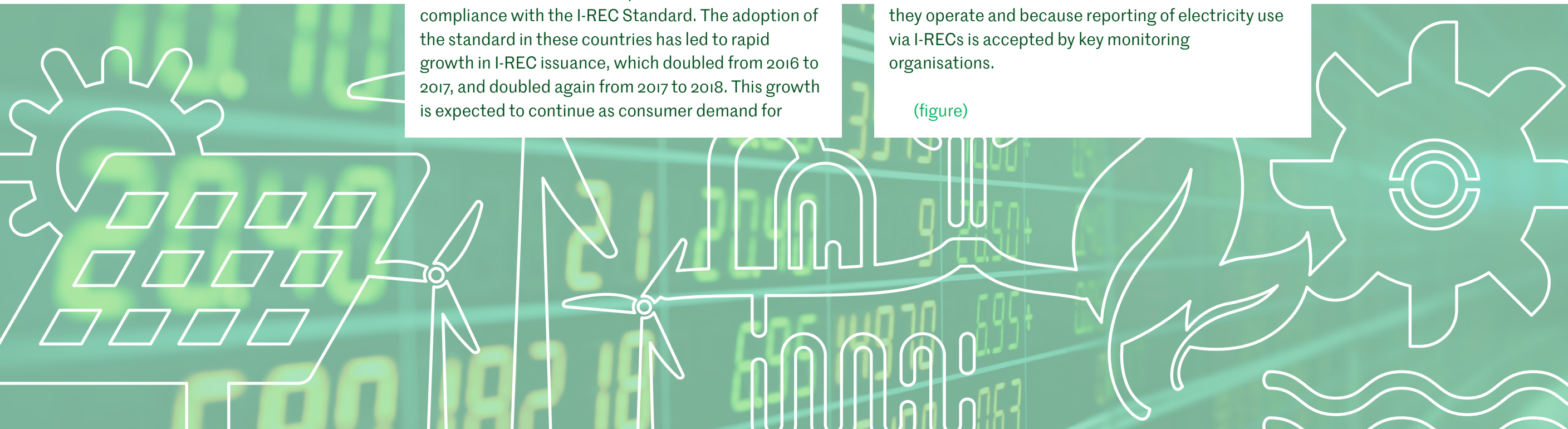
## 3 Market developments

# International Renewable Energy Certification

Outside of the US and Europe, there are a number of energy attribute certificate markets that adhere to international standards. The most developed and most frequently used of these standards is the International REC Standard (I-REC Standard). The I-REC Standard market has grown rapidly since its inception in late 2014. Already 25 countries around the world have established independent issuers to work in compliance with the I-REC Standard. The adoption of the standard in these countries has led to rapid growth in I-REC issuance, which doubled from 2016 to 2017, and doubled again from 2017 to 2018. This growth is expected to continue as consumer demand for

renewable energy expands, thanks to initiatives such as the RE100 and IRENA. Countries facilitate this growing demand by adopting the International REC Standard rules and regulations, or the code documentation. The I-REC Standard is also a crucial tool for multinational organisations intending to reduce the impact of their power use, because they can use the same tool in a number of countries where they operate and because reporting of electricity use via I-RECs is accepted by key monitoring organisations.

(figure)

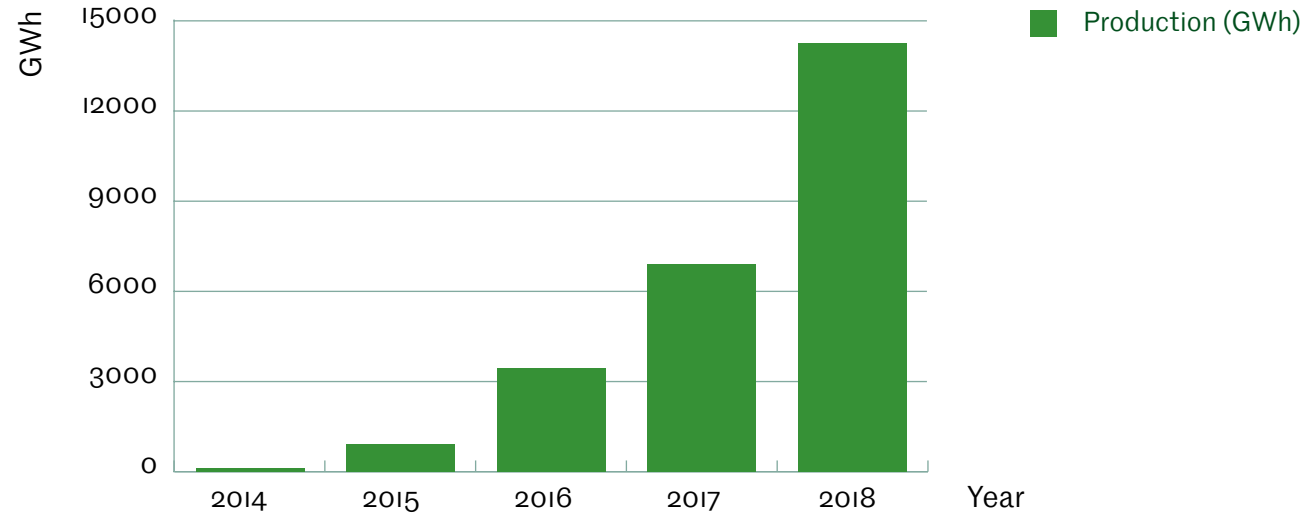


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## 3 Market developments

# Global I-REC issuance\*



\*Source: International REC Standard Foundation

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## 4

# Financial developments

## Overview

Balance sheet

Profit and Loss statement



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## 4 Financial developments

# Balance sheet

### Assets

	In Euros	
	2018	2017
Assets	2,791	7,575
Accounts receivable	10,579	2,784
Cash	260,170	185,945
Other receivables	34,503	47,526
<b>Total</b>	<b>308,043</b>	<b>243,830</b>

### Liabilities

	In Euros	
	2018	2017
Cumulative results	195,711	7,575
Creditors	1,601	2,784
Other creditors	110,731	185,945
<b>Total</b>	<b>308,043</b>	<b>243,830</b>

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## 4 Financial developments

# Profit and Loss statement

### Revenue

	2018	2017
Member fees	165,141	168,008
Meeting fees	300,823	245,675
<b>Total</b>	<b>465,964</b>	<b>413,683</b>

In Euros

### Expenditure

	2018	2017
<i>Internal</i>		
Secretariat	211,728	211,722
Travel & accommodation	10,260	12,881
Financial & legal	6,030	4,420
Operational costs	6,356	4,658
Meetings	191,630	150,521
PR & communication	15,369	12,313
Special projects	11,969	16,900
Result	12,622	269
<b>Total</b>	<b>465,964</b>	<b>413,683</b>

In Euros

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## 5 Organisation

# RECS International

### Overview

#### Board members

#### RECS International members



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## 5 Organisation

# Board members

**Thomas Eccard**  
Chairman/President  
Entelios  
Sweden

**Tom Lindberg**  
Ecohz  
Norway

**Louis von Moos**  
Association ECS Switzerland  
Switzerland

**Marie-Christine Bluett**  
South Pole Group  
the Netherlands

**Saptarshi Pal**  
Statkraft Markets  
United Kingdom

**Oliver Crouch**  
Natural Capital Partners  
United Kingdom

**Ivan Debay**  
Origo  
France

**Eva Klesse**  
KlimaInvest Green Concepts  
Germany

**Dania Piccioli**  
Nvalue  
Switzerland





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## 5 Organisation

# Members in 2018



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## 5 Organisation

# Members in 2018



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## 5 Organisation

# Members in 2018



## RECS International

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