

2016 Annual Report

# Giving consumers a voice and recognizing their value

Shaping an effective renewable electricity market

## Table of contents

1	<b>INTRODUCTION</b>	2
2	OUR MISSION	3
3	MARKET DEVELOPMENTS	4
4	FINANCIAL DEVELOPMENTS	11
5	ORGANIZATION	14

# 1 Introduction

## Giving consumers a voice and recognizing their value

Since its inception 15 years ago, RECS International has been a leader in promoting standardization in electricity markets. Our work has given consumers a voice and instruments which they can use to shape the markets in Europe, but also internationally. Using tools such as the Guarantee of Origin (GO), we inform end-users about electricity products, allowing them to send a clear message to electricity producers, policy-makers and stakeholders that they want more of certain types of products. This strengthens the role of electricity consumers, who usually choose renewable energy, in determining generation. The beauty of Energy Attribute Certificates (EACs) is that legislation is not needed to effect change, as voluntary markets that trade in EACs provide the signals that producers need to make business



decisions. However, when policy-makers recognize the value of consumer choice in this area, this impact is intensified.

In the year ahead we will focus on emphasizing the value of consumers getting involved and on the actions they are taking to procure renewable electricity. Join us in helping to ensure that these voices are heard and that the role of consumers in Europe and around the world is strengthened.

**Claes Hedenström**

President, RECS International

A handwritten signature in black ink, appearing to read 'Claes Hedenström', with a long horizontal stroke extending to the right.

## Table of contents

1	INTRODUCTION	2
2	<b>OUR MISSION</b>	3
3	MARKET DEVELOPMENTS	4
4	FINANCIAL DEVELOPMENTS	11
5	ORGANIZATION	14

# 2 Our mission

RECS International is a non-profit members' organization. Our mission is to create open, international renewable energy markets that are facilitated by commonly accepted attribute tracking systems.

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

At RECS International we believe that the future of the electricity market will be driven by consumers and that Energy Attribute Certificates (EACs), regulations and best practices need to be in place to enable bottom-up growth in that market.





## Table of contents

1	INTRODUCTION	2
2	MISSION	3
3	<b>MARKET DEVELOPMENTS</b>	4
→	EUROPE	5
→	USA	7
→	INTERNATIONAL REC STANDARD (I-REC STANDARD)	9
4	FINANCIAL DEVELOPMENTS	11
5	ORGANIZATION	14

# 3 Market developments

## Overview

- > Europe
- > USA
- > International REC Standard (I-REC Standard)



## Table of contents

1	INTRODUCTION	2
2	MISSION	3
3	<b>MARKET DEVELOPMENTS</b>	4
→	EUROPE	5
→	USA	7
→	INTERNATIONAL REC STANDARD (I-REC STANDARD)	9
4	FINANCIAL DEVELOPMENTS	11
5	ORGANIZATION	14

## 3 Market developments

### Europe

Guarantee of Origin (GO) markets have grown consistently over the last decade. As consumers become increasingly concerned about the origin of their electricity, they have increased their use of GOs to verify their consumption. Disclosure legislation, which is largely enacted at the national level, has supported this trend by mandating the use of GOs for the delivery of renewable products. The figure below shows trends from 2009 to 2016, where the total number of cancelled or redeemed GOs is represented by the red line. The bars represent a combination of the results of EECS standardized GOs and those of individual national GO schemes. Cancelled GOs closely resemble the total number of issued GOs. Above this line you can see the MWhs of renewable electricity production that are 'available for certification'. What this means is that these are MWhs that are produced and based on

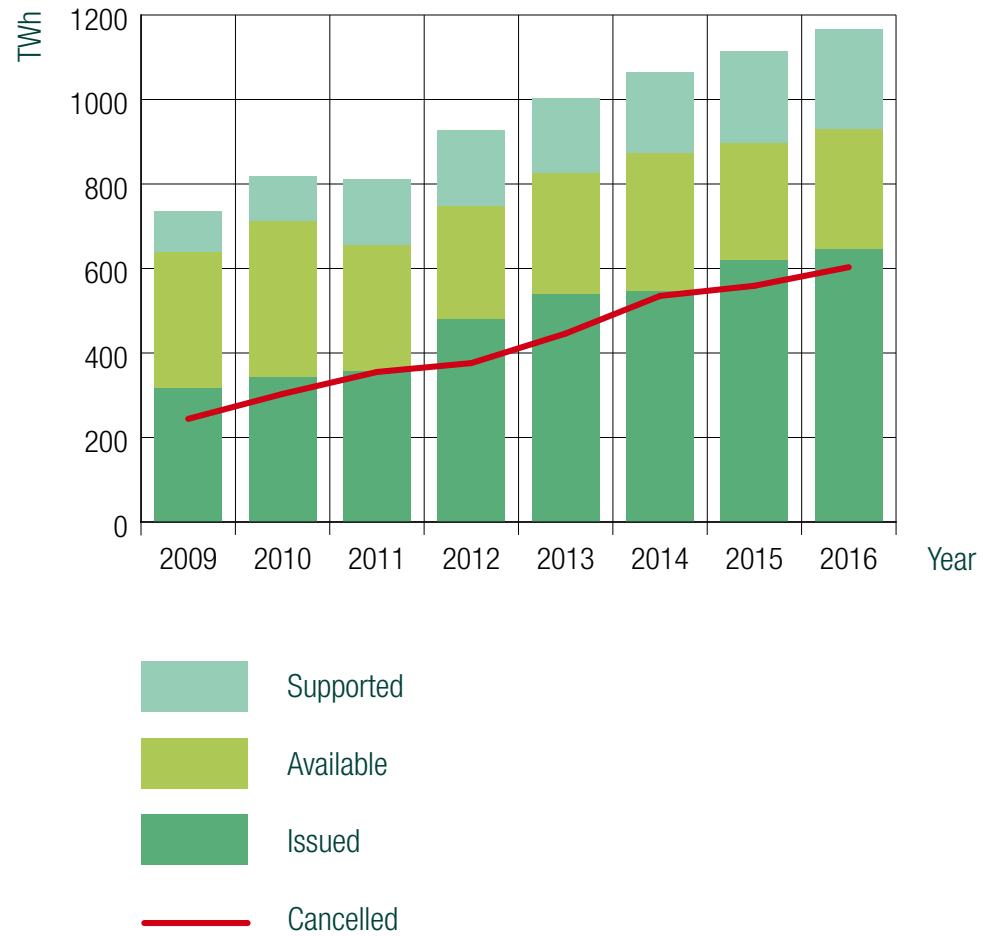
national legislation which could have received a GO, if this had been requested by the producer, but that was not the case. Most of this section relates to regions where the EECS Standard is not implemented and thus the value of a GO is likely to be lower. The top area of the bar chart describes situations such as in Germany where GOs are not issued because there are subsidies for renewable energy. This situation may arise in some areas due to Article 15.2 in the European legislation 2009/28/EC which states: "Member States may provide that no support be granted to a producer when that producer receives a guarantee of origin for the same production of energy from renewable sources." In these cases the Member State has responded to the ruling that production that receives public support (e.g. subsidies) cannot also receive GOs.

## Table of contents

1	INTRODUCTION	2
2	MISSION	3
3	<b>MARKET DEVELOPMENTS</b>	4
→	EUROPE	5
→	USA	7
→	INTERNATIONAL REC STANDARD (I-REC STANDARD)	9
4	FINANCIAL DEVELOPMENTS	11
5	ORGANIZATION	14

## 3 Market developments / Europe

### RES consumption Europe





## Table of contents

1	INTRODUCTION	2
2	MISSION	3
3	<b>MARKET DEVELOPMENTS</b>	4
→	EUROPE	5
→	USA	7
→	INTERNATIONAL REC STANDARD (I-REC STANDARD)	9
4	FINANCIAL DEVELOPMENTS	11
5	ORGANIZATION	14

## 3 Market developments

### USA

US markets are similar to all other energy markets with energy attribute certificates (EACs). US renewable energy producers have the right to have a REC issued for each MWh of energy produced, which form the basis for claims related to renewable electricity. What is unique about the US market, however, is that not all RECs are required to be traded with an attribute tracking system. This means that contractual or paper delivery of RECs is possible and, as such, not reported in the figure below. However you can see that the voluntary consumption of renewables, represented by RECs, as transacted via regional tracking systems, has grown year by year. This growth trend in international attribute tracking markets is evident around the world. As support systems

in the US are generally organized by the state, and states may not unfairly support industries – due to legislation related to the Commerce Clause – support is generally granted on the basis of consumption, not production attributes. This means that states and their suppliers are required to purchase RECs as a method of creating a market-based incentive mechanism for increased renewables production. The section ‘other voluntary consumption’ refers to situations where a regulated entities procure RE above their RPS requirements. This also captures distributed generation where no REC transaction has occurred, such as situations where a rooftop PV owner retains their own RECs.

## Table of contents

1	INTRODUCTION	2
2	MISSION	3
3	<b>MARKET DEVELOPMENTS</b>	4
→	EUROPE	5
→	USA	7
→	INTERNATIONAL REC STANDARD (I-REC STANDARD)	9
4	FINANCIAL DEVELOPMENTS	11
5	ORGANIZATION	14

## 3 Market developments / USA

### RES consumption USA\*



\*Data provided by National Renewable Energy Laboratory (NREL)



## Table of contents

1	INTRODUCTION	2
2	MISSION	3
3	<b>MARKET DEVELOPMENTS</b>	4
→	EUROPE	5
→	USA	7
→	INTERNATIONAL REC STANDARD (I-REC STANDARD)	9
4	FINANCIAL DEVELOPMENTS	11
5	ORGANIZATION	14

## 3 Market developments

### International REC Standard (I-REC Standard)

Internationally the I-REC Standard is the best-known and most frequently used voluntary energy attribute certificate (EAC) outside of the US and Europe. The market for I-RECs has developed rapidly. As of July 2017, the I-REC Standard had authorized an issuer to produce certificates in 18 countries. In all of these countries, the Residual Mix Deadline was in effect, which meant that those generating (renewable) electricity in the calendar year 2016 could only issue a certificate until 15 May 2017. Using this deadline it was possible to

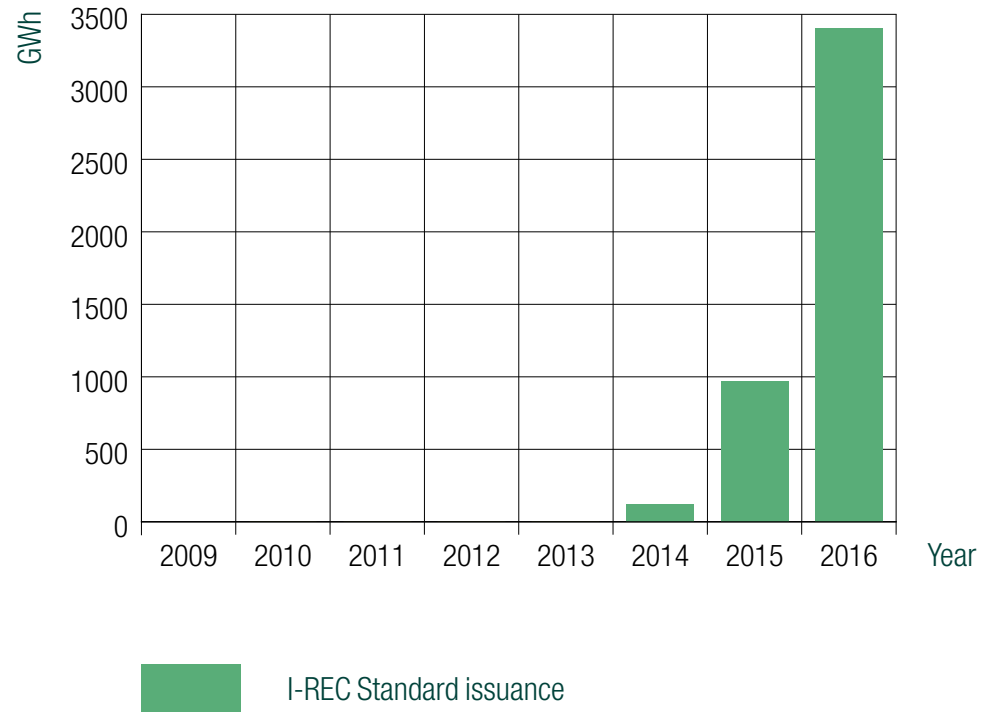
determine that nearly 3.4 TWh of certificates were issued in 2016 (up from 0.96 TWh in the previous year). As I-REC Standard markets grow and consumers become increasingly familiar with attribute procurement outside the US and Europe, these markets are expected to grow at a similar speed to other EAC markets.

## Table of contents

1	INTRODUCTION	2
2	MISSION	3
3	<b>MARKET DEVELOPMENTS</b>	4
→	EUROPE	5
→	USA	7
→	INTERNATIONAL REC STANDARD (I-REC STANDARD)	9
4	FINANCIAL DEVELOPMENTS	11
5	ORGANIZATION	14

## 3 Market developments / I-REC Standard

### RES issuance on I-REC Standard\*



\*Data provided by International REC Standard (I-REC)



## Table of contents

1	INTRODUCTION	2
2	OUR MISSION	3
3	MARKET DEVELOPMENTS	4
4	<b>FINANCIAL DEVELOPMENTS</b>	11
→	BALANCE SHEET	12
→	PROFIT AND LOSS STATEMENT	13
5	ORGANIZATION	14

# 4 Financial developments

## Overview

- > Balance sheet
- > Profit and Loss statement





## Table of contents

1	INTRODUCTION	2
2	OUR MISSION	3
3	MARKET DEVELOPMENTS	4
4	<b>FINANCIAL DEVELOPMENTS</b>	11
→	BALANCE SHEET	12
→	PROFIT AND LOSS STATEMENT	13
5	ORGANIZATION	14

## 4 Financial developments\*

### Balance sheet

#### Assets

	In Euros	
	2016	2015
Assets	7,575	9,967
Accounts receivable	2,784	50,803
Cash	185,945	160,159
Other receivables	47,526	12,435
<b>Total</b>	<b>243,830</b>	<b>233,364</b>

#### Liabilities

	In Euros	
	2016	2015
Cumulative results	182,820	179,039
Creditors	23,135	9,625
Other creditors	37,875	44,700
<b>Total</b>	<b>243,830</b>	<b>233,364</b>

\* The full 2016 compilation report is available at the RECS secretariat.

## Table of contents

1	INTRODUCTION	2
2	OUR MISSION	3
3	MARKET DEVELOPMENTS	4
4	<b>FINANCIAL DEVELOPMENTS</b>	11
→	BALANCE SHEET	12
→	PROFIT AND LOSS STATEMENT	13
5	ORGANIZATION	14

## 4 Financial developments\*

### Profit and Loss statement

#### Revenue

	In Euros	
	2016	2015
Member fees	166,790	206,520
Meeting fees	198,127	200,160
<b>Total</b>	<b>364,917</b>	<b>406,680</b>

#### Expenditure

	In Euros	
	2016	2015
Internal		
Secretariat	181,723	283,747
Travel & accommodation	16,681	13,863
Financial & legal	2,330	10,186
Operational costs	1,550	2,922
Meetings	132,874	154,844
PR & communication	11,068	8,419
Special projects	14,910	90
Result	3,781	-67,391
<b>Total</b>	<b>364,917</b>	<b>406,680</b>

\* The full 2016 compilation report is available at the RECS secretariat.



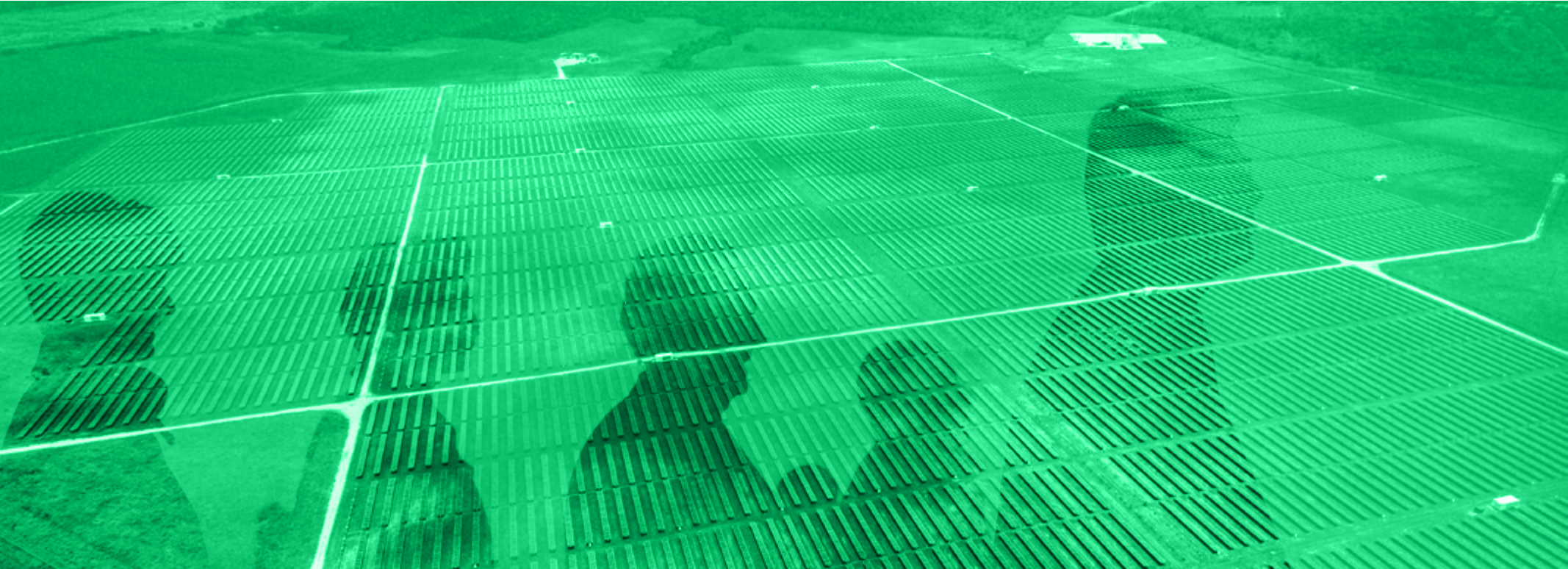
## Table of contents

1	INTRODUCTION	2
2	OUR MISSION	3
3	MARKET DEVELOPMENTS	4
4	FINANCIAL DEVELOPMENTS	10
5	<b>ORGANIZATION</b>	14
→	RECS INTERNATIONAL BOARD	15
→	RECS INTERNATIONAL MEMBERS	16

# 5 RECS International

## Overview

- > Board members
- > RECS International members





## Table of contents

1	INTRODUCTION	2
2	OUR MISSION	3
3	MARKET DEVELOPMENTS	4
4	FINANCIAL DEVELOPMENTS	10
5	<b>ORGANIZATION</b>	14
→	RECS INTERNATIONAL BOARD	15
→	RECS INTERNATIONAL MEMBERS	16

## 5 RECS International

### Board members

**Claes Hedenström**, Chairman/  
President  
Sweden  
Vattenfall AB

**Thomas Eccard**, Treasurer  
Germany  
Markedskraft

**Tom Lindberg**  
Norway  
Ecohz

**Louis von Moos**  
Switzerland  
Association ECS Switzerland

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

**Stefan Ulreich**  
Germany  
e.on

**Saptarshi Pal**  
Netherlands  
Statkraft Markets

## Table of contents

1	INTRODUCTION	2
2	OUR MISSION	3
3	MARKET DEVELOPMENTS	4
4	FINANCIAL DEVELOPMENTS	10
5	<b>ORGANIZATION</b>	14
→	RECS INTERNATIONAL BOARD	15
→	RECS INTERNATIONAL MEMBERS	16

## 5 RECS International

### Members in 2016

3Degrees



ACT Amsterdam Capital Trading



agder energi



alperia

ALPIQ

AVR

aspo

ECS SCHWEIZ  
VEREIN ENERGY CERTIFICATE SYSTEM



BKK



mk-group

Cleanworld  
Hunting green

CLIMEX CE

COMMERG



DONG  
energy

Dutch Waste Management Association  
Partner in the circular economy

e-on

ECOHZ  
ORIGIN MATTERS



EDP Produção  
Grupo EDP

EHA



## Table of contents

1	INTRODUCTION	2
2	OUR MISSION	3
3	MARKET DEVELOPMENTS	4
4	FINANCIAL DEVELOPMENTS	10
5	<b>ORGANIZATION</b>	14
→	RECS INTERNATIONAL BOARD	15
→	RECS INTERNATIONAL MEMBERS	16

## 5 RECS International / Members





## Table of contents

1	INTRODUCTION	2
2	OUR MISSION	3
3	MARKET DEVELOPMENTS	4
4	FINANCIAL DEVELOPMENTS	10
5	<b>ORGANIZATION</b>	14
→	RECS INTERNATIONAL BOARD	15
→	RECS INTERNATIONAL MEMBERS	16

## 5 RECS International / Members

**numerco**  
energy, renewable and industrial product supply

**NLON**

**Nvalue**  
environmental energy

**ORIGO**  
L'ORIGINE MAÎTRISÉE

**PAWEX**

**res**

**renewable choice**  
ENERGY

**REPOWER**

**RWE**  
The energy to lead

**Skagerak Energi**

**Skellefteå Kraft**

**SKS**

**south pole**  
group

**Stadtwerke Bielefeld**

**Statkraft**

**STX**  
SERVICES

**Nordic Green Energy**

**Svensk NaturEnergi**

**SYNECO**

**UPM**

**UTILITÀ**  
L'energia che serve alle imprese

**VATTENFALL**

**VINDENERGI**

**WESTERNenergy**  
CONSULTING

**windunie**

Secretariat

Achter de Tolbrug 151  
5211SM 's-Hertogenbosch  
The Netherlands  
+31 (0)26 820 03 96  
secretariat@reco.org

design:

