

No. 3

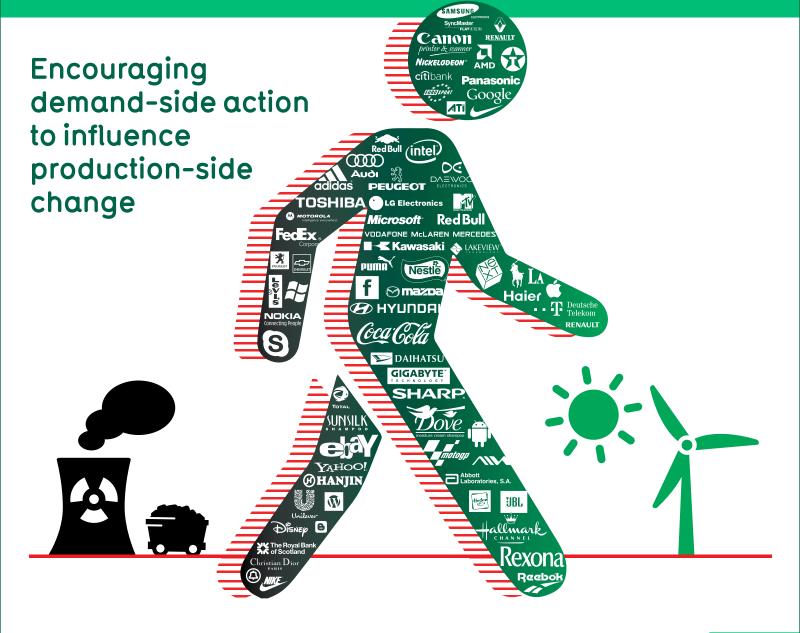
Magazine

April 2015

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There's change in the air





In the world of renewable electricity everything is changing for the better: the market is changing, the role of consumers is changing, the system for delivering consumption attributes is changing, and RECS International is changing, too.

RECS International is a 12-year-old foundation and we created the RECS certificate. We had the wild idea of creating a standardized European tracking certificate that could deliver consumption attributes in the same way to consumers across Europe. This idea is now a reality and the guardians of standardized GOs – the Association of Issuing Bodies - do a great job in managing this. Under their direction the EECS-GO has become internationally recognized as one of the most trustworthy systems for delivering renewable attributes from the place where electricity is produced to the place where it is consumed. The system works, but the way the system is used needs to be improved. This is where RECS comes in. As national regulatory experts take over the design of the GO system, RECS International will focus on the disclosure, use and consumption of GOs. This will require us to review national disclosure regulations as well as international standards and European law.

The GHGP Scope 2 report is a good example of this. Together with a group of stakeholders we have been able to promote consumer choice, clear attribute delivery, adherence to the physical reality of electricity, cost efficiency ... and the potential for individual consumer impact through the use of narrative disclosure.

These issues are covered in this issue of RECS Magazine, but there's a lot more to the system and the use of GOs than what's written here. I suggest that you come to the RECS Market Meeting 2015 in Oslo on 29 and 30 April. Apart from hearing about new developments worldwide, you will meet everybody involved in the European market for renewable attribute procurement.

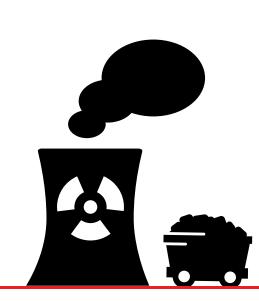
See you in Oslo,

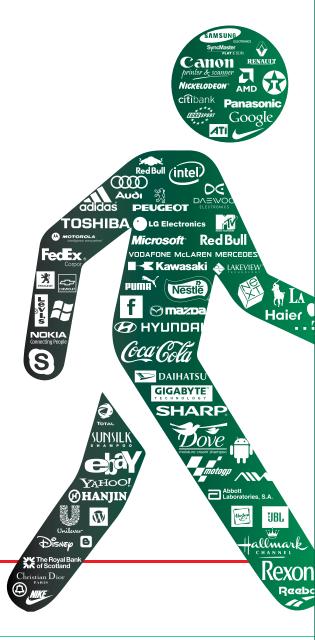
Peter Niermeijer Secretary-General, RECS International



Encouraging demand-side action to influence production-side change

Those who purchase electricity see renewable energy becoming a cost-efficient alternative to fossil fuels. They want to invest in renewable energy and support the growth of renewable production. National governments increasingly recognize this untapped demand for renewable energy, seeing the benefits of empowering people to consume the electricity of their choice. With the right tools, this new bottom-up approach to the electricity market is powerful enough to change the way energy is produced ... but we need the right tools.





Encouraging demand-side action to influence production-side change

Supporting consumer choice and action has become better understood and recognized in the last few years. Ten years ago renewable stakeholders, national regulators – even consumers themselves - never looked at the consumption side of the electricity market. It was all about more production - ignoring the fact that electricity is always used! Today we know that encouraging a fast transition to renewable resources means activating the consumption of renewable resources, giving different electricity products a price and thus influencing the production of cost-efficient, renewable technologies.

One of the tools we use to provide this consumption and market-based incentive is attribute tracking certificates. Around the world these may be known as Renewable Energy Certificates (RECs) or Guarantees of Origin (GOs), but the principle is the same. These certificates provide proof that a specific unit of renewable generation is consumed by a single user or organization. The right to 'claim' that it is renewable power is attached to these mechanisms. Consumers are demanding more transparency about the source of the electricity they use and the attribute tracking certificate is just one tool that can provide that insight. This need not be restricted to renewable electricity; there is already a tendency among consumers to value full transparency about all electricity resources. This gives every source of electricity a price, driving the influence of consumer choice on the grid.

Another tool is standardized carbon accounting rules for businesses. The Greenhouse Gas Protocol Scope 2 guidance is a good example. After a four-year, international stakeholder review, the GHG Protocol released their quidance document last month. For businesses around the world this report is as good as the law - mandating how and what is a renewable energy purchase for which zero-carbon claims can

be made. The adoption of these rules in the CDP climate change survey is having a growing influence on large companies, forcing all businesses to play by the same rules.

The most recent tool in our toolbox is the RE100 project. RE100 – a cooperation of the Climate Group and CDP – is encouraging 100 global businesses to go "100% renewable". This is done by providing the guidance and methodology needed to make this step. RE100 will also define leadership criteria for businesses that are able to go beyond 100% renewables purchase by providing methods for them to directly influence the production of new renewable energy. So far 15 ambitious, forward-thinking global companies have signed on with RE100.

But, as every craftsman knows, having the right tools is one thing; it's another thing knowing how to use them! As RECS International we provide a solution for that at our annual conference: the RECS Market Meeting. This is quickly becoming the place where purchasers, suppliers and stakeholders of renewable electricity meet on an annual basis to discuss developments in the renewable electricity market in Europe and abroad. In 2015 the RECS Market Meeting will take place in Oslo, Norway on 29 and 30 April. The event this year is entitled, "Renewable Energy, Consumers and the Market" and, on behalf of the organizers, I hope to see you there!

Jared Braslawsky

Deputy Sectary-General of RECS International

BIO:

Jared is Deputy Secretary-General of RECS International, a non-profit organization that works to create an effective renewable electricity market for all consumers. Jared believes that empowering

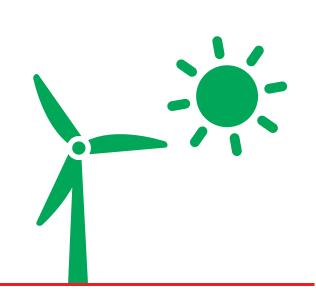
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Encouraging demand-side action to influence production-side change

electricity consumers to make more sustainable choices will promote a demand-side push for the cost-efficient development of sustainable renewable technologies. Jared co-founded the International REC Standard in order to globally promote and implement standardized demand-side systems. Jared is also a member of the Technical Working Group of RE100, which works to get 100 of the world's most influential companies to commit to procuring 100% renewables.







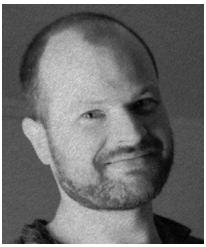
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Interview with

Pedro Faria; Technical Director of CDP

1. What is CDP and what is your role in it?

CDP is an international, non-profit organization that provides the only global system which allows companies and cities to measure, disclose, manage and share vital environmental information. These insights enable investors, companies and governments to mitigate risks related to the use of energy and natural resources while identifying opportunities for taking a responsible approach to the environment.

As Technical Director of CDP, I am responsible for three main areas. The first involves defining the information that we ask companies to disclose through our Climate Change, Water and Forests questionnaires. The second is developing and enhancing CDP's scoring methodologies, which are used to assess how detailed and comprehensive companies are when disclosing information, as well as to evaluate their environmental actions. The third area is data stewardship, which means ensuring that our data is fit for purpose, usable, accessible and free of error, to the fullest extent possible.



Pedro Faria; Technical Director of CDP

2. What is the reach of CDP in the business world?

CDP is an investor-led organization. Requests for disclosure come from the 822 signatories we represent. These investors hold US\$ 95 trillion in assets – a little less than half of global invested capital. Our multi-purpose climate change questionnaire is used to update results related to our climate change and supply chain programmes.

Over 4,500 companies located all over the world reported to us in 2012. Over 80% of Global 500 companies engage with us to ensure effective measurement of their carbon footprint and climate change-related actions. We also provide a global process for supply chain disclosure, through which information gathered from over 2,400 suppliers is used by senior management in more than 50 of the largest organizations worldwide. In total, 6.8 gigatonnes of Scope 1 greenhouse gas emissions are reported through our programmes. This is equivalent to roughly 20% of global carbon emissions.

3.
That end-users of electricity have a choice of electricity product is rather new in Europe and the US. What do you require from corporate end-users wanting to profile their consumption of a specific electricity product in Europe?

CDP asks all companies to report on their power consumption and Scope 2 emissions originating from the electricity, heat and cooling they purchase and consume. We allow companies to account for zero-carbon emissions on the power they generate on-

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site from renewable sources – or that they procure through contractual agreements with renewable power suppliers.

Our aim is to consistently improve transparency in disclosure, while minimizing the amount of information requested from companies. These two figures – MWh consumption and Scope 2 tCO2e – can give a good picture of how a company is performing in terms of energy efficiency and energy procurement and that is why we have been asking companies to report on them. With the publication of the new GHG Scope 2 Guidance and the clarification of Scope 2 accounting and reporting requirements by the GHG Protocol, we will introduce some changes to our questionnaires to fully align with the new guidance, but we foresee doing this only for the 2016 cycle.

And, if there were no electricity attribute tracking system, I can imagine this task would be difficult. What do you require then?

The lack of a standardized tracking system adds complexity and blurs the transparency of disclosure. To address this issue we ask companies to report the reason why they think they can apply a zeroemissions factor to the power they procure or produce. For example, this could be a power purchase agreement (PPA), which may or may not be backed by attributes. CDP has no way to enforce specific accounting practices. However, what we can do – and aim to achieve – is transparency in companies' practices, enabling the wider community to form their own opinions and raise their concerns.

That said, a number of new initiatives are bringing international standardization to attribute tracking

systems around the globe. One of these is the International REC Standard. This new standard could play a role in limiting the complexity of procuring renewable energy and simplifying the process of disclosing the use of zero-emission electricity.

5. How has the recent publication of the Greenhouse Gas Protocol Scope 2 Guidance affected your operations?

We had been following as well as encouraging this debate for guite a few years and have been active contributors to it. Already in February 2013 we released a public version of our Scope 2 accounting technical notes to present and explain new recommendations on the calculation of Scope 2 emissions in corporate GHG inventories (Scope 2 accounting), to summarize the main questions arising from the debate on this, and to clearly state our position.

With the final publication of the GHG Protocol Scope 2 Guidance we think there is no major conflict between our current approach and what has been laid out in the guidance. As mentioned before, we will introduce the necessary changes to our questionnaire and reporting guidance for the 2016 reporting cycle to ensure that we are in line with all GHGP Scope 2 Guidance recommendations.

6. What does the future of CDP? Where will you be in five years?

That's a really hard question! Our vision is to create a global economic system that operates within sustainable environmental boundaries and prevents April 2015

dangerous climate change. Do you think we will still have a reason to exist in 2020? I think so!

More seriously, in the years ahead we intend to focus on some really important issues for companies and at the same time simplify our current disclosure requirements. We are implementing a sector strategy, which will allow us to evaluate the relevance of the disclosure requested for each sector. This might lead to some requirements being dropped and new things being added. It might also result in expansion to other areas of natural capital and ecosystem services, something we started doing with our Water programme, which was launched in 2009, and with the addition of a Forest programme in 2013.

The ultimate aim, however, is to facilitate more action from companies. For example, through our Action Exchange initiative, which brings together companies that need solutions - either technically or financially, for example for an energy efficiency project – with those that can provide those solutions. In line with this way of thinking we partnered with The Climate Group to start the RE100 project, which promotes the use of 100% renewable electricity by the world's most influential companies.

Part of renewable procurement is also exploring whether it's possible for a company to make what I call 'transformative electricity consumption', i.e. when you buy a MWh of renewable energy, you want to know that you will be contributing to adding new renewable capacity to the system. This could create a positive feedback loop and thus contribute to decarbonizing the energy mix. I imagine that not every company will be able to do this, but it should be an option, which is why we have set up partnerships with companies such as ECOHZ to define these options. We are working with WWF, WRI and UNGC on science-based climate target setting,

which we think will play a key role in the future of our scoring methodologies. We are also guite active on the investor side, doing more investor-oriented research and designing products that can be useful for investors when deciding on asset allocation. You know there's so much going on, I could go on for ages. One thing is for sure: CDP will continue to be an innovative organization that offers fresh solutions for addressing resource scarcity issues, not only in terms of climate change, but also in the use of fresh water as a key – and increasingly scarce – resource for the energy sector.





News

Publication of GHGP Scope 2 Report facilitates Company Disclosure of the Use of Renewable Energy

As of 20 January 2015, "Companies Can Now Credibly Report Emissions From Low-Carbon Electricity Purchases*" according to the Greenhouse Gas Protocol, a global collaboration led by the World Resource Institute (WRI) and the World Business Council for Sustainable Development (WBCSD). We at RECS International are pleased to see years of our work reflected in this report. Peter Niermeijer, Secretary General of RECS International is encouraged, saying, "This is another step towards our goal of promoting choice in electricity products among all users of electricity. The choice of these individual consumers should also be reflected in renewable support solutions that are implemented by national governments. By using the power of consumer choice we will be able to increase the cost-efficient implementation of new sources of renewable energy and encourage consumer interest in renewable electricity more generally."

*www.ghgprotocol.org/node/458

Council of European Energy Regulators publishes Advice on Consumers and Electricity Sources

CEER recently published a report, "Advice on customer information on sources of electricity". The purpose of this report is to provide advice on the "transparent, reliable, consistent and fraud-resistant" disclosure of electricity attributes. The report goes on to say: "Such a disclosure system enhances competition in the energy market by providing more reliable choices, which is why electricity disclosure and its main instrument - the Guarantee of Origin (GO) - are essential for creating a voluntary, consumer-driven market for renewables." The report lists a number of recommendations covering various topics, ranging from consumer empowerment and strengthening national disclosure systems to the disclosure of support mechanisms and the use of green electricity product labels.

To find out more, go to http://goo.gl/3TQyrB

Use of GOs at unprecedented levels

The European market for renewable energy, which is documented with Guarantees of Origin, grew by 26.5% in 2014 compared to 2013. However, growth in the issuance and cancellation of all GOs, including fossil-fuel-based and nuclear GOs, pushed total cancellations in 2014 to an astounding increase of 31%. At RECS International we believe that this growth is the result of a combination of two factors: 1. An improvement in national disclosure regulations, and 2. An understanding that reliable electricity disclosure among companies Is based on a transparent tool and has a factual basis. In Europe that tool is the Guarantee of Origin.



RECS Market Meeting 2015 Oslo, Norway



Renewable Energy, Consumers and the Market

Never before has a European conference made such a direct link between individual corporate sustainability and corporate returns.

In the opening session we will hear from H&M about their renewable energy procurement policy as well as their wider sustainability goals. H&M participates in the RE100 initiative, a representative of which will also give a presentation in the first session. RE100 is a corporate initiative set up to encourage 100 of the largest companies to procure 100% renewable energy. Many well-known companies have already signed up to achieve this ambitious goal, including

Philips, Mars, BT, Swiss Re, KPN and Nestlé. Finally, the session will finish with a speaker from Storebrand, an asset management group which uses sustainability indicators as a tool for predicting reliable, financially stable portfolios for their clients. For them sustainability is particularly valuable as it delivers a better return on investments.

Every session at the RECS Market Meeting has a unique storyline that is tailor-made to addressing an important topic that affects the renewable electricity market in Europe and around the world.

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What you can expect from the RECS Market Meeting 2015

This conference will give you a broad picture of the renewable electricity market.

- Hear what large energy consumers such as H&M and RE100 have to say about their sustainability profiles, renewable electricity purchases and hopes for the future of sustainable business.
- Find out about the zero-carbon developments in the transportation sector in Europe and hear from NSB Passenger and the Sustainable Development Foundation.
- Get an inside view on how large consumers deal with carbon accounting standards (with contributions from GHG Protocol, CDP, RobecoSAM and IKEA).

- Learn about trends in European disclosure from a panel of experts from AIB, Grexel, CEER and the Swedish Energy Agency.
- Become a more effective communicator in the renewable electricity industry in a special miniworkshop.
- Hear about past and future developments in the EECS-GO market and learn what consumer purchasing habits can tell us about the likely events in the year ahead.
- Join the keynote session to hear from senior executives from DNV GL, Nasdaq and Statkraft about the energy transition and Europe's future.

For the latest RECS Market Meeting programme please go to www.recsmarket.eu

Three specialized pre-conference workshops on 28 April in the afternoon

These specialized pre-conference workshops cover interested in the renewable electricity market in Europe, the US and other international markets. They are also intended for all who are interested in the legal issues that market players face in their daily business. Choose one of the following topics:

- Fast track towards a European renewable energy market with contributions from experts from EKOenergy, Verein ECS Switzerland, Norwegian Water and Energy directorate, and Ostfold Energi.
- An introduction to US and other international REC Markets. Hear from US and international market players such as Center for Resource Solutions, IREC, Ed Holt & Associates and Energiakolmio Portfolio Services

 Contracts/regulatory training for renewable energy traders presented by the legal team from DLA Piper.

More information

The 5th RECS Market Meeting will take place at the Radisson Blu Plaza hotel, Sonja Henies Plass 3, N-0134 Oslo, Norway on 29 and 30 April 2015.

For more information please call the organization team at RECS International on +31 26 820 03 96 For the latest programme go to www.recsmarket.eu.

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New milestones reached in the market for electricity with guarantee of origin



Hans-Petter Kildal Vice-President Sustainability Bergen Energi Green Services AS

Purchase of electricity with guarantee of origin reached new all-time high levels in 2014. In total the consumption amounted to 311 TWh, up from 245 TWh in the previous year. This is a yearly increase of 21 per cent, as you can see in Figure 1.

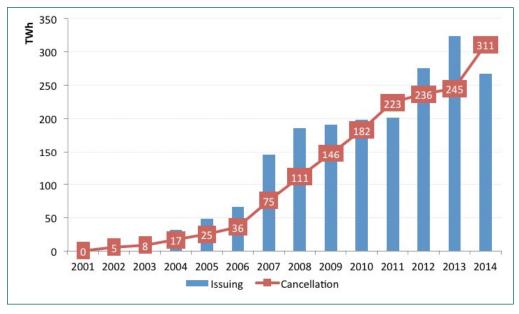


Figure 1. Yearly issuing and cancellation of GOs

The increase in cancelled certificates is mainly due to development in three countries, namely Switzerland, Germany and Italy (Figure 2).

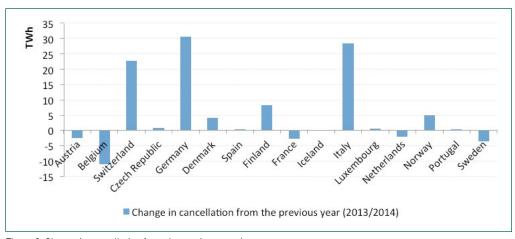


Figure 2. Change in cancellation from the previous year by country



An obligation for disclosure has been introduced in Switzerland, with the enforcement of the revised energy regulation starting from January 2013. This obligation has lead to a significant increase in the Swiss cancellation numbers, which in 2013 was at 117 per cent of the total electricity consumption, and a staggering 200 per cent in 2014.

The increase in the Italian cancellation numbers is due to two main factors: Changes in the Italian certificate registry were completed in 2014, enabling import of certificates. And the local green certificate scheme was cancelled, leading to increased use of guarantees of origin. The German increase from 50 TWh in 2013 to 80 TWh in 2014 represents an increase from 11 to 17 per cent from the total German electricity disclosure. The main reason is the switch from 'direct marketing' to GO electricity disclosure. When it comes to cancellation by technology type, hydropower is still the largest, even though wind and biomass are growing significantly (Figure 3).

The largest growth in cancellation is in the hydro power sector, with approximately 43 TWh increase in cancelation (Figure 4), followed by wind (an increase of 11 TWh) and biomass (8TWh).

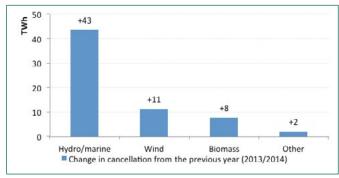


Figure 4. Change in cancellation from the previous year by technology

After many years with oversupply of Guarantees of Origin in Europe, the 2014 figures indicate that the market is now more balanced.

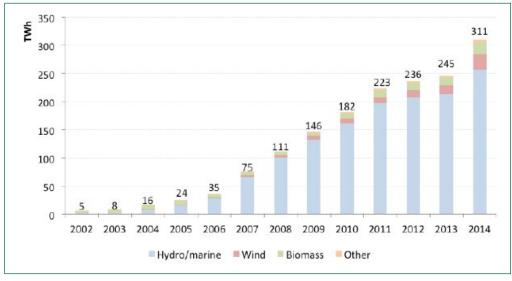


Figure 3. Cancellation by technology type



RECS Magazine

RECS International is a non-profit organization that promotes an open, pan-European renewable energy market, facilitated by commonly accepted and harmonized tracking systems. In order to realise this vision we encourage the dissemination of accurate information to consumers regarding their electricity and energy purchases. RECS International is a membersbased association with over 200 corporate members from 22 countries. If you are interested in the benefits of membership with RECS International, please contact the Secretariat via

The articles in this magazine have been edited by members of the secretariat of RECS International, but the opinions held by the authors are theirs alone and do not necessarily express the views of RECS International. Please send letters to the editor to



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