



Energy Attribute Certificates as tools for climate action

The role of quality labels and CDP compliance criteria





Climate Strategies



Compensation Neutralization



Climate Protection
Projects



Green Energy



my.FirstClimate.com

So that this webinar runs smoothly:



Ensure that your camera and microphone are turned off



Please note:

- We will be recording the webinar
- All participants will receive the recording and the slides after the webinar



Please send us your questions in the Q&A tool. We will collect them for the discussion round at the end of the webinar



Technical problems?

Please let us know in the chat.

Our team will try and help you



Agenda

- Introduction to First Climate and CDP
- Introduction to corporate RE sourcing and EAC markets from FirstClimate
- Discussion: How CDP and RE100 interact with corporate RE sourcing and EAC markets
- First Climate for a discussion of premium EAC labels and impact
- Discussion: RE100's work on impact
- Q&A



Introducing First Climate



Generating positive climate impact – since 1999

With over twenty years of experience and hundreds of diverse clients, First Climate is a leading service provider of climate protection solutions and renewable energy. We support private and public sector organizations in achieving their climate and sustainability objectives.



Our Services: At a Glance

Our core competencies include products and services relating to carbon neutrality, green energy, green investments, and project development. For public sector clients, we provide consulting for industry best-practices as well as emissions trading services.



Facts and Figures

A team of over **80 staff** across **7 locations** globally

We support over **500** carbon offset projects



EACs provided for more than

150 clients



More than **900** private and public sector clients

100,000,000 VERs retired on behalf of our clients.

Development of more than **70** climate protection projects

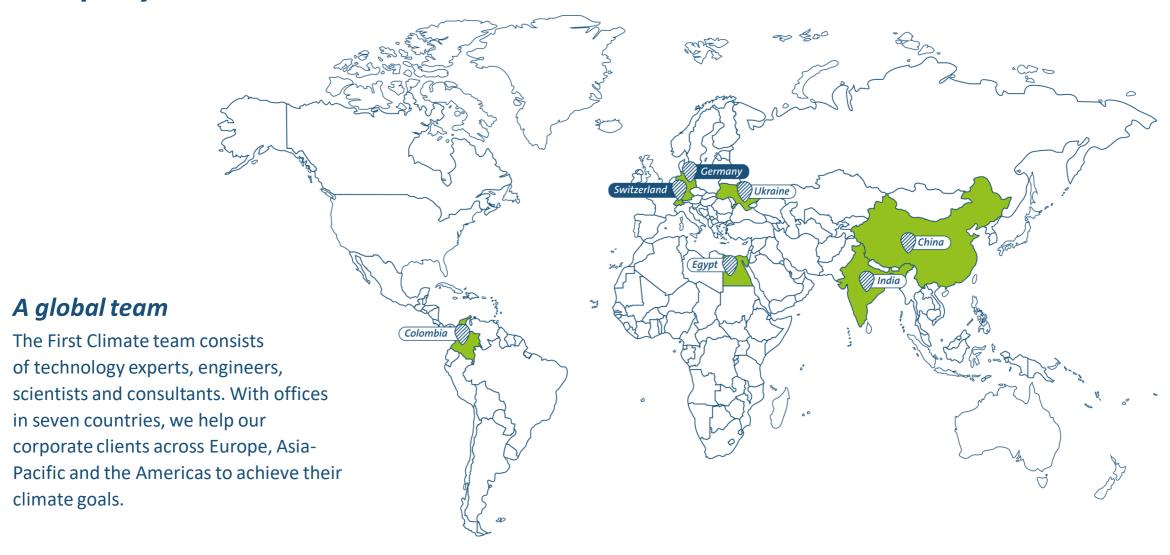
EACs sold in 2021:







Company Locations





Client References

















































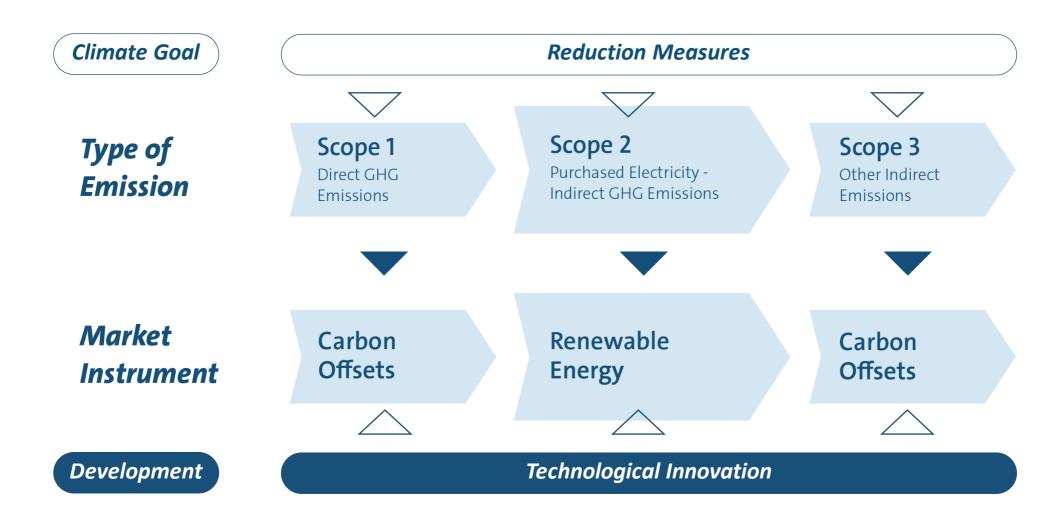








Measures for Accomplishment of Climate Goals





Our support for your Net Zero Journey



Capacity Building & Strategy

- Environmental impact & climate risk assessment
- Net Zero workshops

Target Setting & Quantification

- Target development in line with SBTi
- Carbon footprinting services
- Product carbon footprinting

Implementation & Reduction

- Planning & evaluating internal reductions (scopes 1-2)
- Supply chain analysis (scope 3)

Compensation & Neutralization

- Project development and support
- Procurement of green electricity (scope 2)

Reporting & Communication

- External reporting support (e.g. CDP)
- Communications
 Assistance





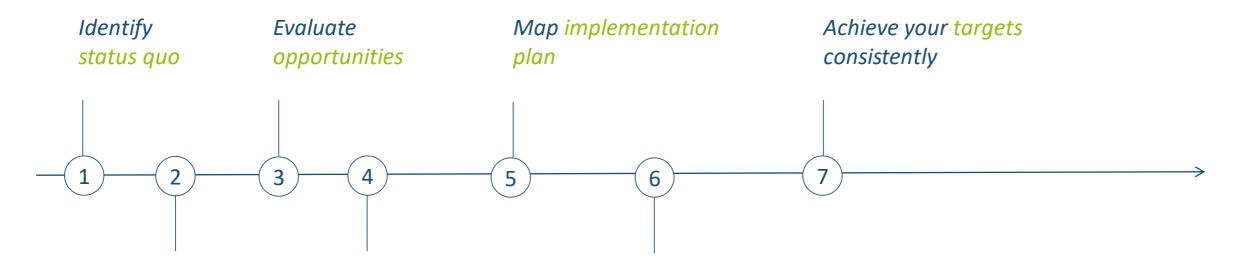
ABOUT CDP



- CDP runs the global disclosure system that enables companies, cities, states and regions to measure and manage their environmental impacts.
- ▼CDP has built the most comprehensive collection of self-reported environmental data in the world.
- CDP's global network of investors and purchasers and policymakers use CDP data and insights to make better-informed decisions.
- Offices and partners in 50 countries have driven unprecedented levels of environmental disclosure.

Introduction to corporate RE sourcing and EAC markets

Roadmap for corporate RE-procurement



Establish a
common
understanding
within company

Develop a business case and prioritize

Execution of procurement strategy

Instruments for RE procurement



Unbundled Energy
Attribute Certificates
(EACs)

- Proof of origin of 1 MWh of renewable electricity fed to the grid
- Attributes are mainly based on the technology, geographic location and time of generation



Utility/Supplier Green Electricity Products / Bundled EACs / Green Tariffs

- Green power offered by utility suppliers generated from renewable sources
- "Bundled" product that includes both the EACs and the underlying physical electricity



On-site Generation

- The RE asset (e.g. solar panels, wind turbine) is located on the site of consumption
- RE asset is self-owned or owned by a third party
- Residual electricity (if any) sourced from the grid



Off-site
Power Purchase
Agreement (PPA)

- Usually, a long-term contract to procure EACs and underlying electrons from a specific RE asset(s)
- Or a financial hedge and related EACs under a virtual PPA structure, without physical supply
- Can also be signed with new build and existing RE assets



Audience Question - 1



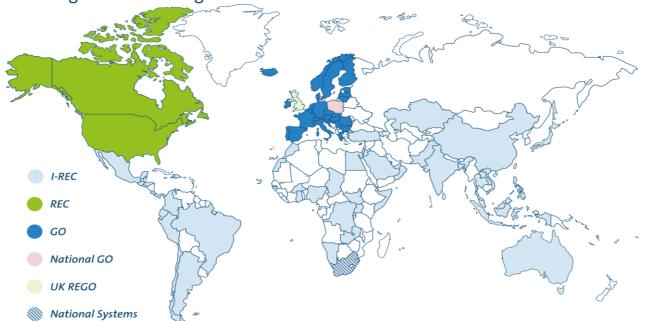


Energy Attribute Certificates

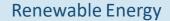
RE-Facilities are being verified according to the following certification schemes:

- Guarantees of Origin (GoO),
- International Renewable Energy Standard (I-RECs)
- Renewable Energy Standard (RECs)

They are issued and transferred through electronic registries.



Technologies



- Wind
- Solar
- Hydro
- Biomass
- Geothermal



Discussion:

How CDP and RE100 interact with corporate RE sourcing and EAC markets



RE100 members are corporate leaders in renewable electricity





RE100 is a global initiative to accelerate the transition toward decarbonised grids, using corporate electricity demand as a lever for policy change

- RE100 members set a target year by which they will source 100% of the electricity they consume renewably
- RE100 members' aggregated demand for renewable electricity sends a signal to suppliers, investors, and policymakers to add more renewable electricity capacity and lower barriers to its voluntary procurement
- RE100 members follow the RE100 technical criteria in their procurement *and have unique* reporting requirements to CDP

How do CDP and RE100 interact with corporate renewable electricity sourcing?





- Corporate renewable electricity sourcing instruments are voluntary instruments with no global frameworks to guide their use for *making claims*
- TEACs and the claims they are used for should have a strong connection to physical flows rather than being globally traded, fungible instruments
- RE100 sets explicit rules for purchasing of renewable electricity with claims to having used renewable electricity
 - The sample: it is not credible to purchase an EAC for renewable electricity generated in the United States and claim that renewable electricity has been consumed in China

RE100's growth

- RE100
 °CLIMATE GROUP
- CDP

- 350+ members
- 370+ TWh of annual electricity demand, now sourced 45% renewables
- Most new membership is headquartered in the Asia-Pacific
- Most new members are in the manufacturing sector
- Average target year of RE100 members is 2030



- RE100's most challenging markets: South Korea, Japan, China, and Singapore.
- Members cite a lack of in-market procurement options or supply availability

What are the RE100 technical criteria?





- The RE100 technical criteria:
 - Outline appropriate organizational boundaries for a 100% renewable electricity target
 - Specify eligible renewable electricity technologies and sourcing methods which give credible claims to use of renewable electricity
 - Specify market boundaries: sourcing of renewable electricity must be from the same market its consumption is claimed in
 - Call for transparency and require third-party verification of consumption of renewable electricity
- ■96% of members' claims align with the RE100 technical criteria

First Climate for a discussion of premium EAC labels and impact



Premium Labels

- With premium ecolabel (or high quality) GoOs, companies have the option of buying a high impact renewable energy product that is simple to implement without binding, long-term financial commitments
- Choosing to procure high quality GoOs will reduce the Scope 2 carbon footprint and at the same time contribute to e.g. the building of new renewable power plants, support communal projects
- Companies may see a reputational boost from being associated with projects that prove additionality











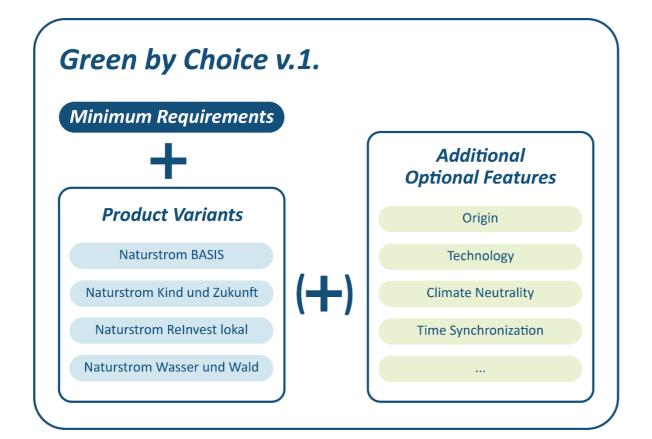


Audience Question - 2





Green by Choice 1.1











Green by Choice 1.1 for corporates with international consumption



Naturstrom BASIS

- For "Naturstrom BASIS"
 (Basic) the minimum
 requirements for green
 power quality of "Green by
 Choice v1.1" apply.
- This variant can be combined with other optional additional features



Naturstrom Reinvest lokal

- The goal of "Naturstrom Reinvest lokal" (Naturstrom local reinvestment) is to create additional environmental benefits through an additional donation to the promotion and expansion of renewable energies locally.
- For the "Naturstrom Reinvest lokal" product variant, an investment of at least € 0.25 per MWh goes to local environment initiatives. The investment is documented every three years from the start of the project.
- Seal users may present a selection of projects to be first discussed with First Climate. Together, suitable projects are selected by project type, e.g. climate protection, energy efficiency, or sustainability education projects.
- This variant can be combined with other optional additional features.



Green by Choice 1.1 **Certificate**

CERTIFICATE Netwiston Naturation Netwiston Net









Certificate-ID: C-06-2022-21256121-2 Certificate for: Green by Choice (version 1.1)

First Climate Markets AG Certificate holder: Industriestr. 10

61118 Bad Vilbel, Germany

30.06.2023

Certification basis: "Green by Choice" criteria catalog (version 1.1) with the following

central requirements:

- The green power certificates (HKNs/GoOs, I-RECs, RECs or certificates from the respective national certificate system) for the Green by Choice product (version 1.1) originate entirely from renewable energies in accordance with the regulations applicable in the respective
- The product variant "Naturstrom BASIS" meets all minimum requirements for the product Green by Choice (version 1.1).
- The product variant "Naturstrom Wasser und Wald" also guarantees a subsidy of 2 Ct./MWh or at least 250,- € per year and customer for the Bergwaldprojekt e.V. for the implementation of regional environmental protection measures.
- The product variant "Naturstrom ReInvest lokal" ensures a funding contribution of at least 25 Ct./MWh into local and ecological projects implemented by offering energy suppliers or end
- The product variant "Naturstrom Kind und Zukunft" is characterized by a donation of 2 Ct./MWh or at least €250 per year and customer, which goes to social projects of the German Children's Fund or other socially committed associations.
- All of the above product variants can be combined with optional additional features regarding country of origin, carbon neutrality of upstream chain emissions, generation technology, plant age, monthly coincidence of time and reinvestment obligations of plant operators.

Voluntary evidence was provided through an audit that the above requirements have been met for calendar year 2021, and the requirements are in place for 2022.

Cologne, 23 June 2022

Valid until:

Michael

Dipl.-Ing. Norbert Heidelmann TÜV Rheinland Energy GmbH Sustainability and Carbon Services

Florian Grießl, M.Sc. TÜV Rheinland Energy GmbH Sustainability and Carbon Services

TÜVRheinland®

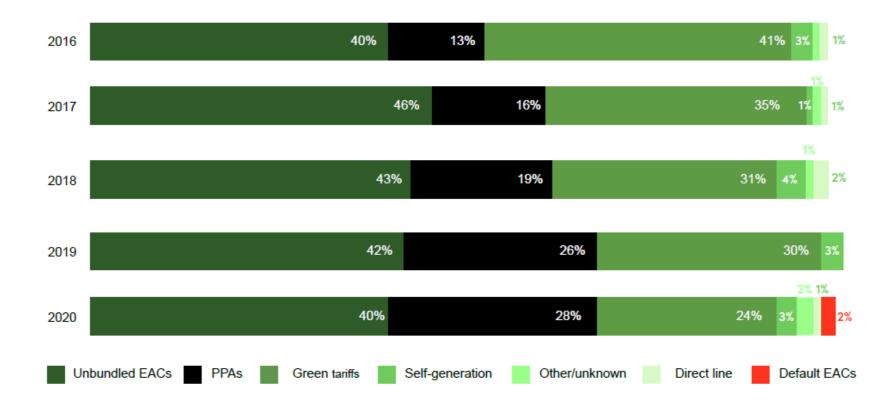


Impactful procurement in RE100





RE100 members are tending to increase their use of direct sourcing methods in markets where they are available

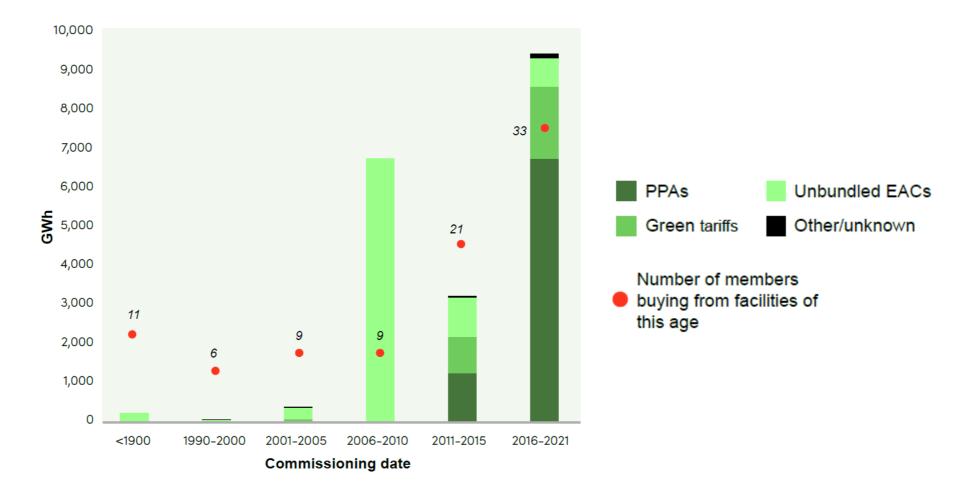


Impactful procurement in RE100





Linking procurement types with commissioning dates of generators procured from



Plans for impact in RE100





- Tuture RE100 annual reports will give additional recognition to members sourcing more renewable electricity:
 - **▼**Using direct sourcing methods
 - Trom newer generators
 - ■With an additional, voluntary, sustainability label
- Tuture revisions of the RE100 technical criteria may include:
 - More restrictive single market definitions to further strengthen the link between claims and physical flows
 - ▼Principles for sourcing renewable electricity across market boundaries
 - A requirement to purchase from generators commissioned in the last fifteen years

Questions?



First Climate

GREEN BY CHOICE

First Climate Markets AG

Industriestr. 10 61118 Bad Vilbel / Germany

First Climate (Switzerland) AG

Brandschenkestrasse 51 8002 Zurich / Switzerland



