Implementing the New Scope 2 GHGP Dual Reporting – Part 2

November 17, 2015

Anthesis

Agenda

- Webinar series - format and approach
- About Anthesis
- Content
  - Recap of new Scope 2 guidance and reporting requirements
  - Implications for implementation, including calculation tools
- About Envizi
  - Envizi functionality and examples
- Q&A

Anthesis

enVizi

Approach and Logistics

- Webinar series
  - Part 1: Introduction to accounting concepts and requirements (Oct 13)
  - Part 2: How to update / leverage tools to support data collection, management, reporting for the dual approach (today)
  - Part 3: How to report to CDP using the new Scope 2 requirements, with CDP (February 2016)
- Q&A format
- Slides availability

Anthesis is a specialist global consultancy which believes that commercial success and sustainability go hand-in-hand

- Launched in September 2013 in the US
- Global specialist in sustainability and environmental advisory and delivery services
- 130+ staff and growing rapidly with teams currently in the US, UK, Germany, the Philippines and China, and the Middle East
- Privately held and over 17 years operating history (via UK and German acquisitions)
- We offer services that fully address corporate environmental and sustainability program needs
- We have a highly regarded track record with Fortune 500 and FTSE 100 clients as well as start ups and non-governmental organizations

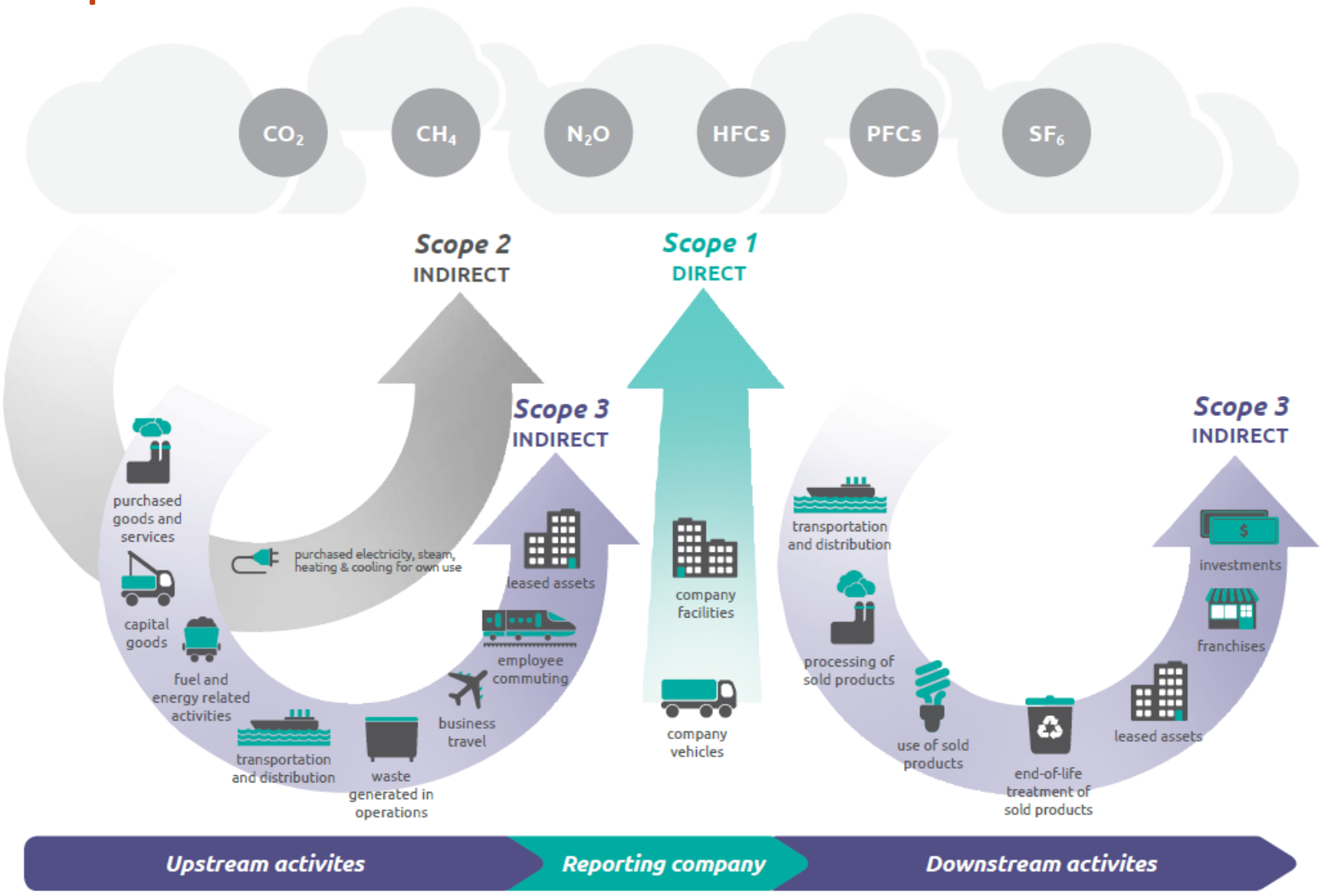
Anthesis

Recap of New Scope 2 Guidance

- Background
- Dual accounting methods
- Emission factor hierarchies
- Scope 2 quality criteria

NOTE: Dual approach is required for most companies.

Scopes Across the Value Chain – GHG Protocol

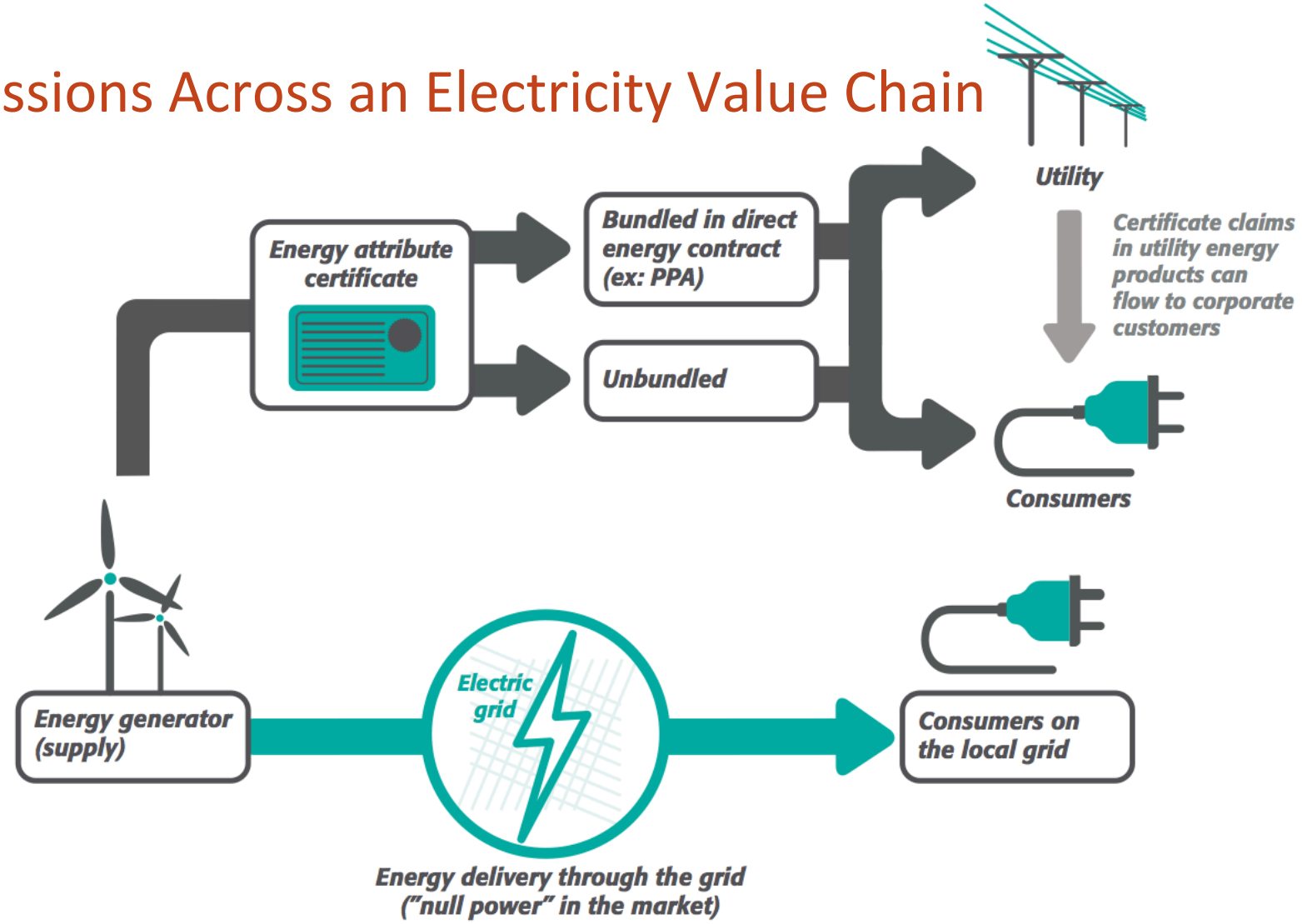


Anthesis

WORLD RESOURCES INSTITUTE

GREENHOUSE GAS PROTOCOL

Emissions Across an Electricity Value Chain



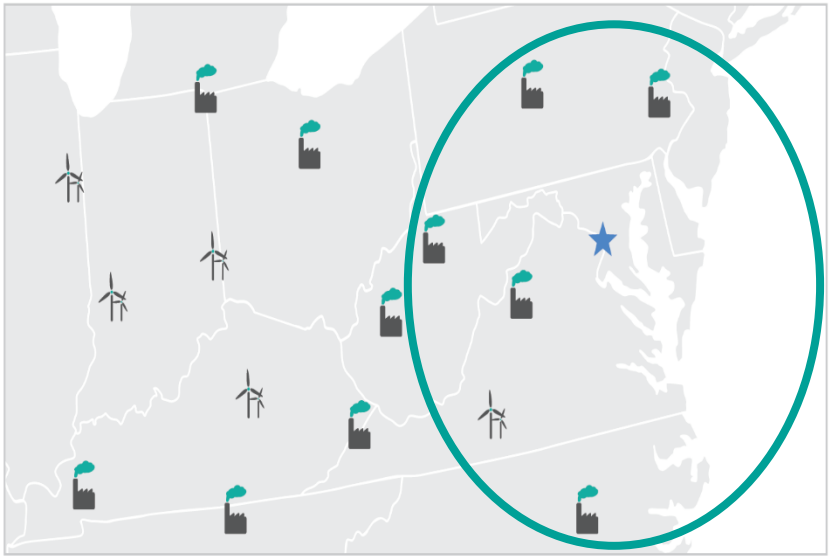
Anthesis

WORLD RESOURCES INSTITUTE

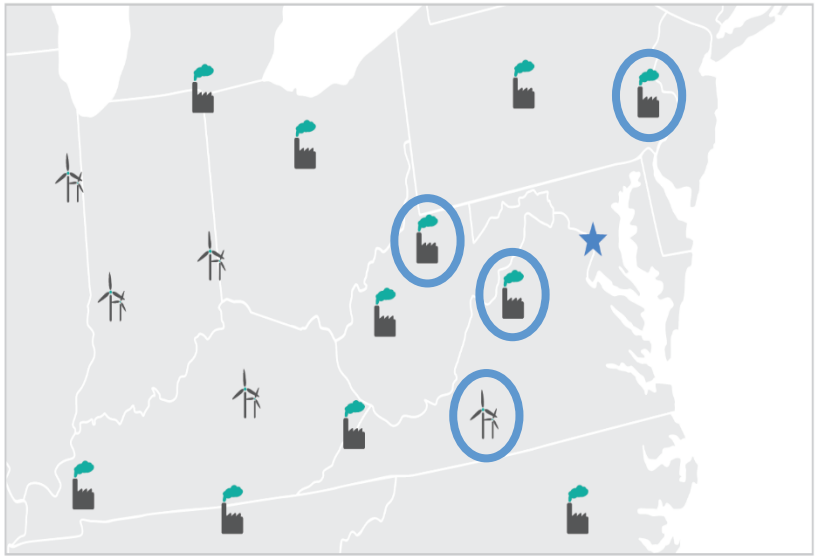
GREENHOUSE GAS PROTOCOL

Understanding the Two Accounting Methods

Location-based



Market-based

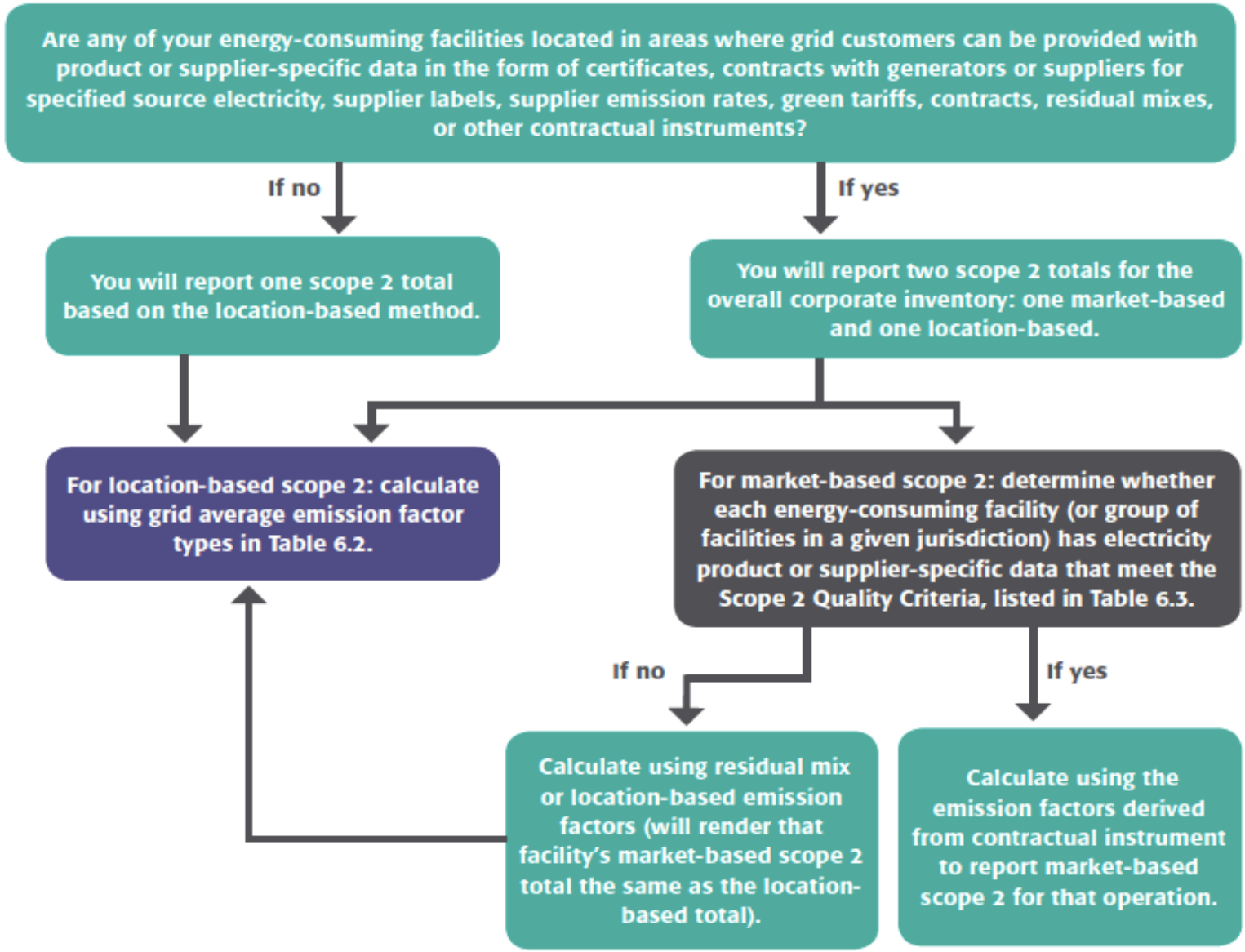


Anthesis

WORLD RESOURCES INSTITUTE

GREENHOUSE GAS PROTOCOL

Figure 6.1 Determining which accounting methods to use for scope 2



Understanding the Two Accounting Methods - Emission Factor Hierarchies & Sources

Location-based method emission factor hierarchy
1. Regional or sub-national emission factors (e.g. US eGRID, UK DEFRA)
2. National production emission factors (e.g. IEA)

Market-based method emission factor hierarchy
1. Electricity attribute certificates or equivalent instruments
2. Contracts for electricity, such as PPAs
3. Supplier/Utility emission rates
4. Residual mix (sub-national or national)
5. Other grid-average emission factors (sub-national or national) *see location-based data*

Scope 2 Quality Criteria

Contractual instruments shall:

1. Convey GHG information
2. Be an exclusive claim
3. Be retired
4. Match up to inventory period
5. Be sourced from same market as company

Utility emission factors shall be:

6. Calculated based on delivered electricity

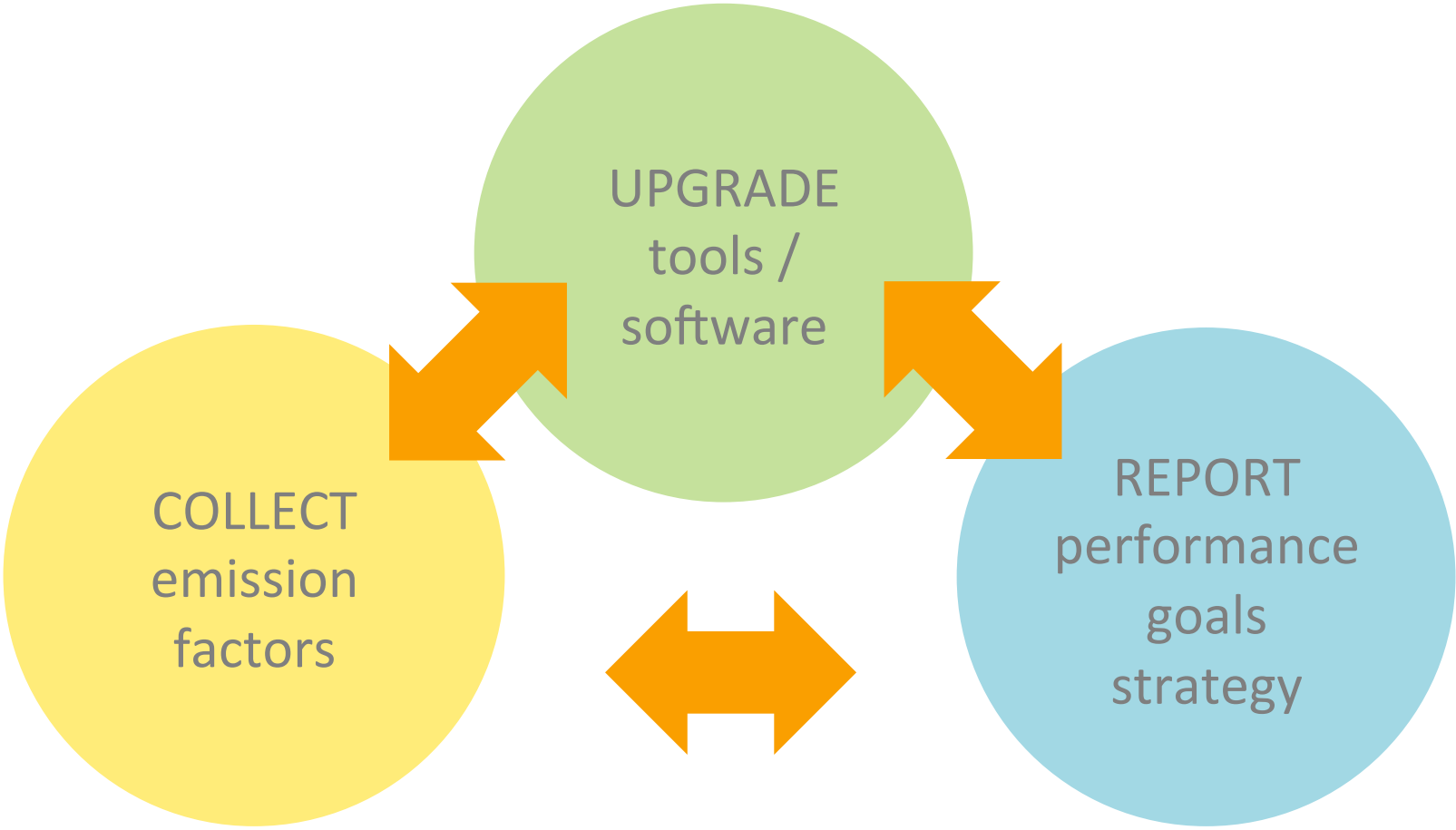
Direct purchases shall:

7. Convey GHG claims to the purchaser

Using any instruments requires:

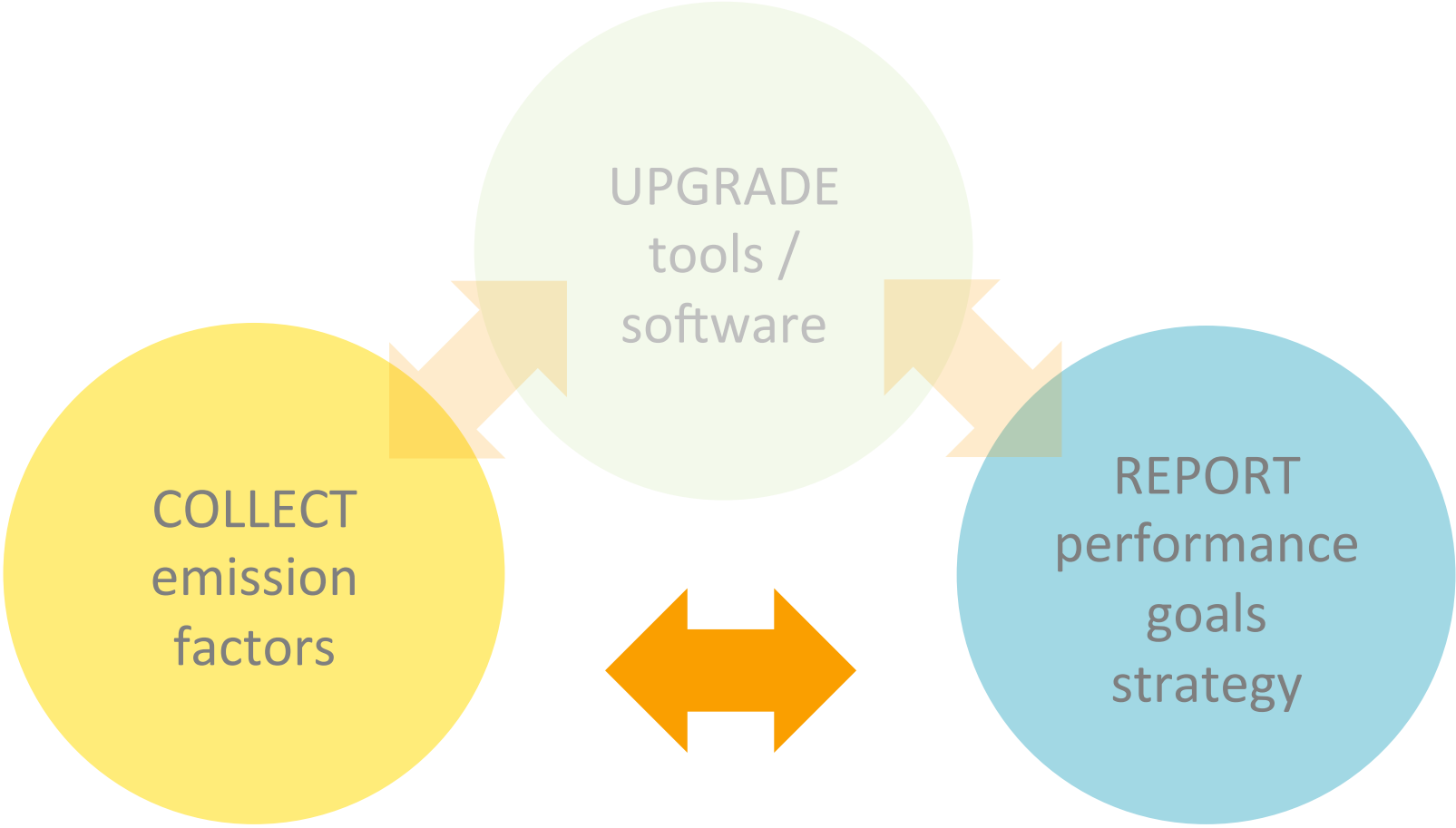
8. Adjusted residual mix, or disclose its absence

Implications of Dual-Reporting Requirements



Anthesis

Implications of Dual-Reporting Requirements



Anthesis

Market-Based Emission Factors

Market-based EF Hierarchy	Contracts + standard grid electricity purchases	Standard grid electricity purchases only
1. Electricity attribute certificates or equivalent instruments	X	
2. Contracts for electricity from specified sources, where electricity attribute certificates do not exist	X	
3. Supplier/Utility emission rates	X	X
4. Residual mix (sub-national or national)	X	X
5. Other grid-average emission factors (sub-natl or natl)	X	X

Anthesis

Residual Mix Emission Factors

Definition:

The mix of energy generation resources….in a defined geographic boundary **left after contractual instruments have been claimed/retired/cancelled**. The residual mix can provide an emission factor for companies without contractual instruments.

Availability of residual mix data is currently limited:

- Data is available for 31 European Countries through www.reliable-disclosure.org[1]
- Green-e has published residual mix emission factors for the US and Canada NERC regions[2]
- EPA eGRID has released the new 2012 data files on Oct 8th, but they do not include Residual Mix.

[1] http://www.reliable-disclosure.org/upload/65-RE-DISS_2013_Residual_Mix_Results_v1-0_2014-05-15.pdf

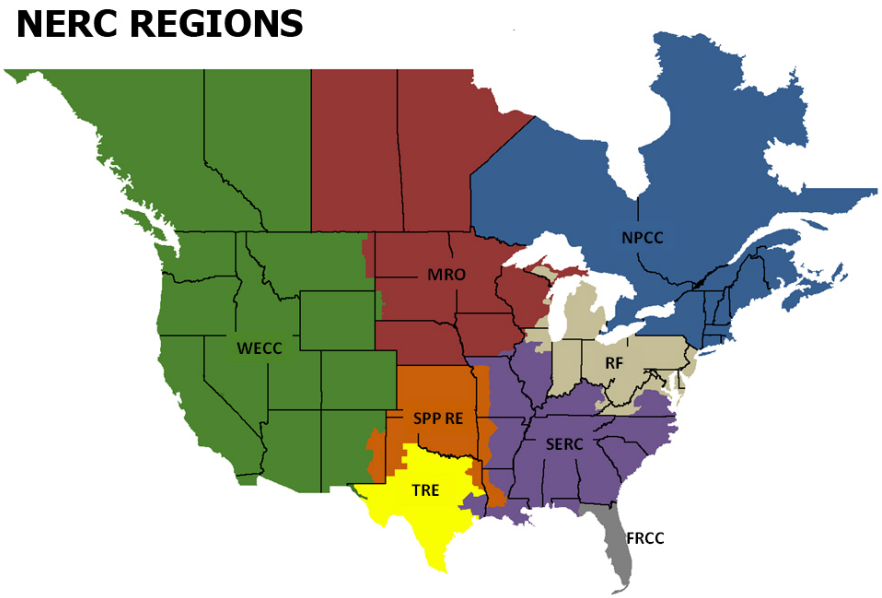
[2] http://www.green-e.org/docs/energy/ResidualMix2015.pdf

Anthesis

Green-e Residual Mix Emission Factors

Challenges

- Only one set of residual mix EFs for US and Canada
- Based on 2013 certified sales and the grid data available as of April 2015 (That grid data was 2010 for US eGRID and 2012 for Canada.)
- Published for the larger NERC regions vs the smaller eGRID subregions and Canadian provinces

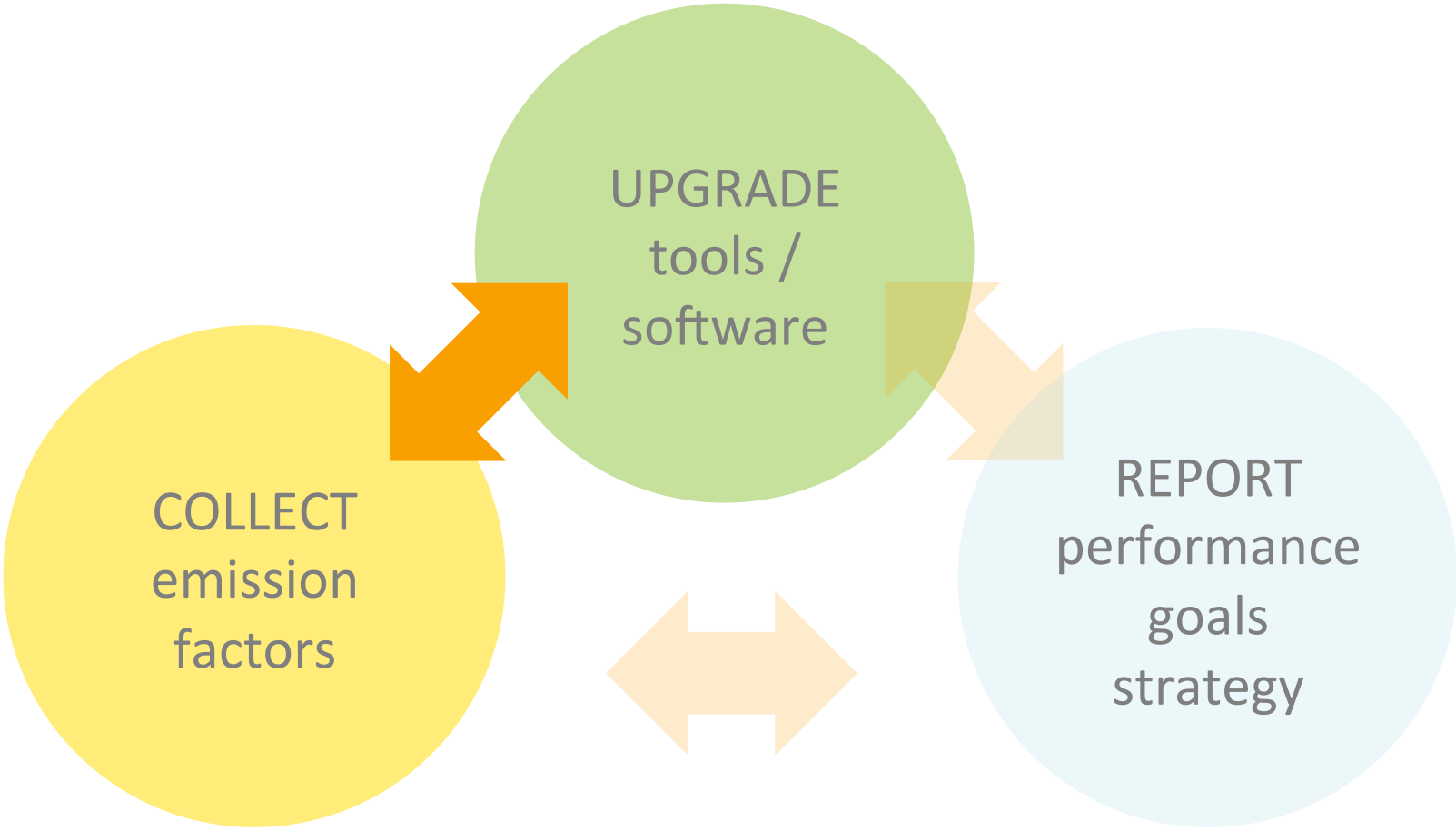


Anthesis

Emission Factors – GHGP Principles

- **Relevance**
  - Have you owned/retired RECs during the reporting year?
  - Do you have contracts for electricity from specified sources (e.g. CHP plants)?
  - Do you purchase a green electricity product or tariff from any of your suppliers?
  - Do you have large campuses where you pay the utility bill directly?
- **Completeness**
  - Have you assigned market-based emission factors to each of your sites?
- **Consistency**
  - Have you been consistent in how you apply market-based emission factors?
- **Transparency**
  - Have you documented which emission factors you are using in your IMP?
  - Are you citing which method(s) you are using when externally reporting emission values?
  - Are you stating key limitations/assumptions?
- **Accuracy**
  - Do you have documentation to show that supplier emission factors meet the Scope 2 quality criteria?
  - Do you have enough information to pass third-party verification?

Implications of Dual-Reporting Requirements



Anthesis

Upgrading Tools / Software

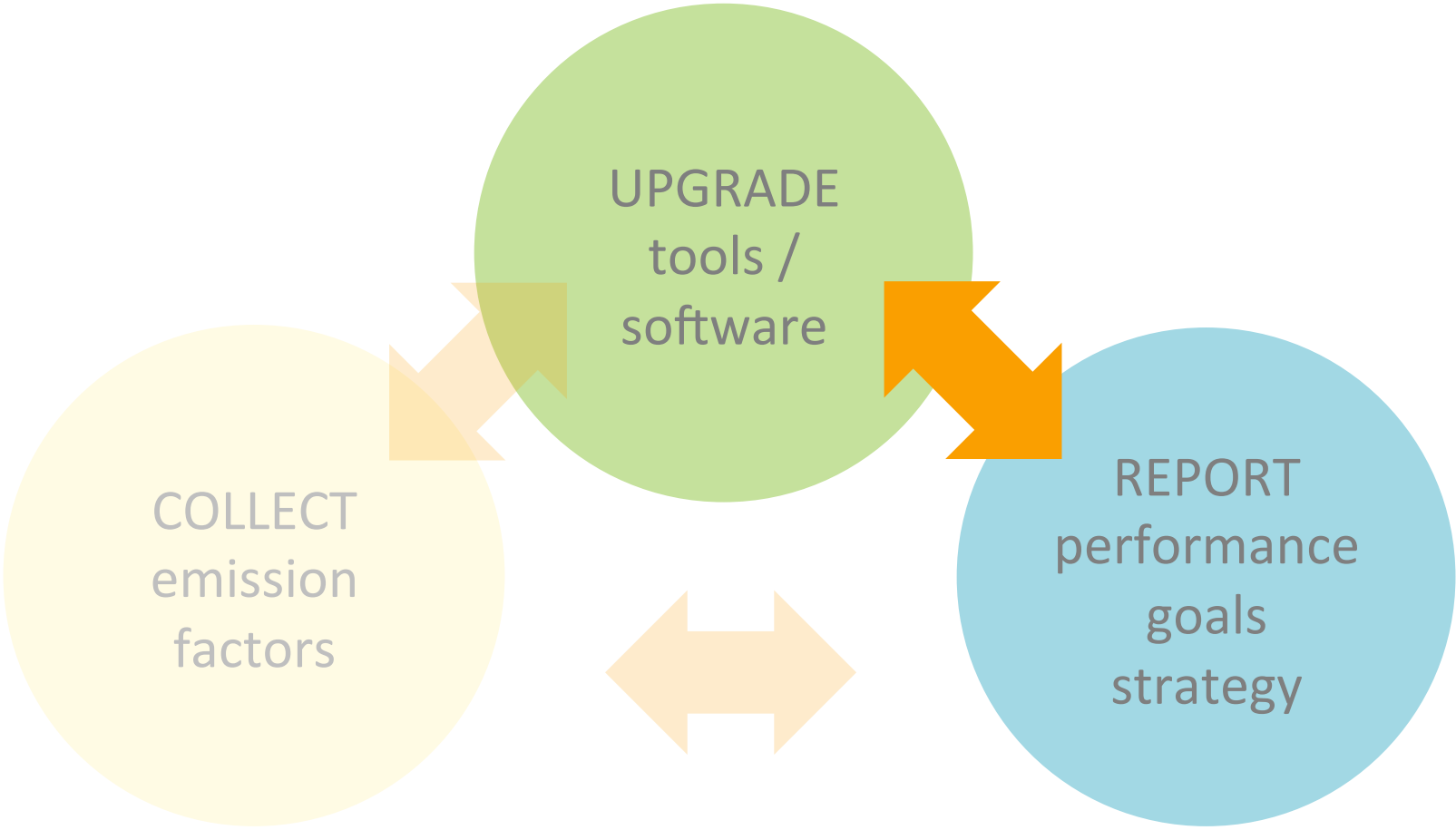
Relevance

- for Excel-based spreadsheets as well as enterprise software

Updates

- second set of market-based EFs and carbon calculations
- method for handling multiple EFs for one site (e.g. you purchase RECs to cover half of the electricity and standard electricity product for the remaining half)
- separate totals for market-based and location-based emissions

Implications of Dual-Reporting Requirements



Anthesis

Benefits of Technology

Operational and cost efficiencies to businesses

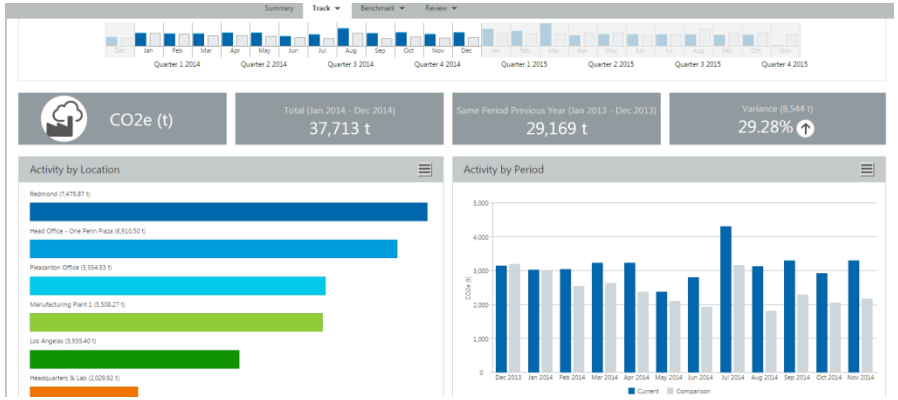
- Single system of record for all stakeholders
- Globally accessible for multiple users
- Streamline data capture
- Data management for all organizational & reporting hierarchies

Robust Data Management and Reporting

- Data validation and data integrity
- Audit trails, supporting reports and 3rd party access
- Ease of reporting for external reporting and management requirements
- Performance reporting available to multiple users and management teams

About Envizi

- Global, cloud based software platform that distils complex sustainability and energy data into powerful insights
- Core technology was developed for energy management in 2004
- Heritage operating within energy and carbon compliance driven markets
- Proven solution with over 120 enterprise clients across 114 countries, covering extensive industry verticals
- 3rd party industry analyst validation of Envizi market leadership – Verdantix,
- Scalable and modular in its architecture
  - Sustainability Management
  - Utility Expense Management
  - Building Energy Optimization
  - Asset Performance Management



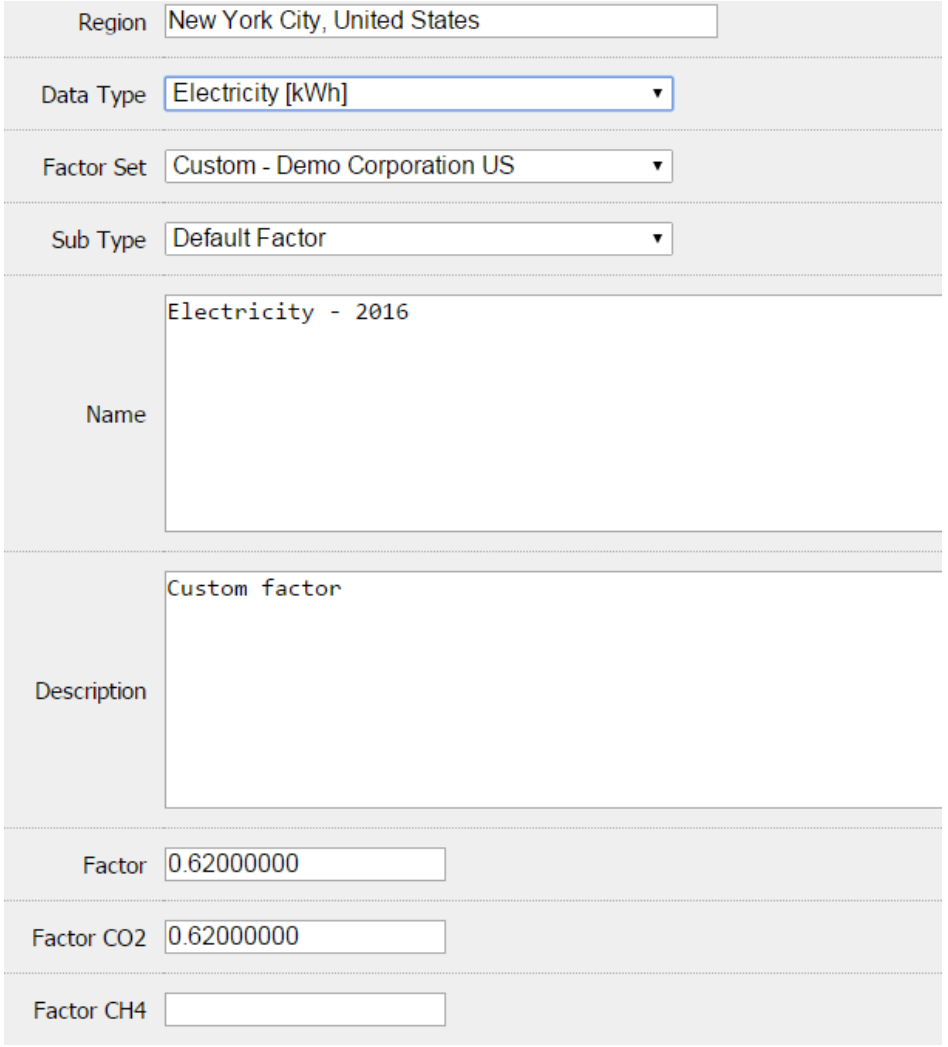
Anthesis

enVizi

Existing Functionality – Custom Factors

Proven capability in managing custom emission factors

- Calculate emissions using higher order methodologies for regulatory reporting
- Modify factor attributes like effective periods and global warming potential
- Supersede Envizi managed factors with their own factors for any type of data.



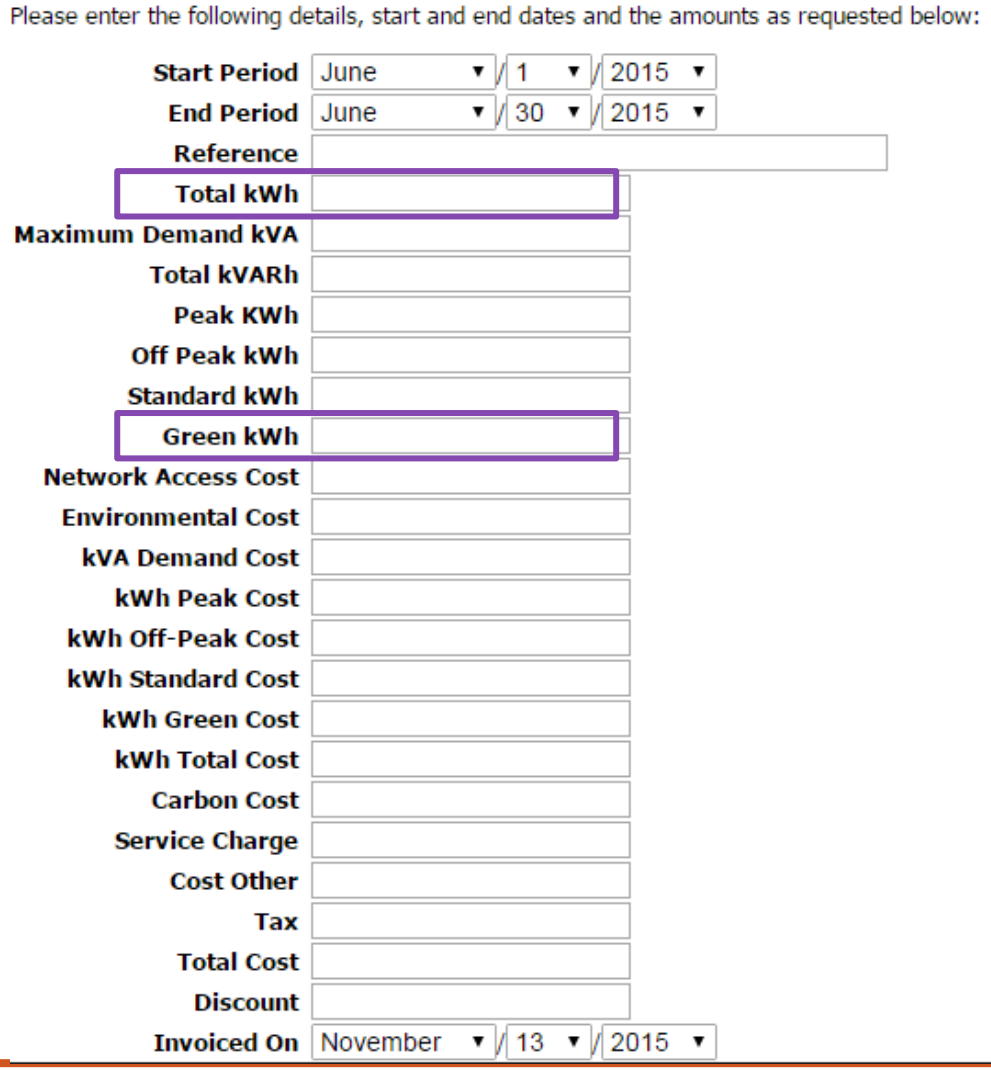
Anthesis

enVizi

Existing Functionality – Account Styles

Configured account styles to client requirements

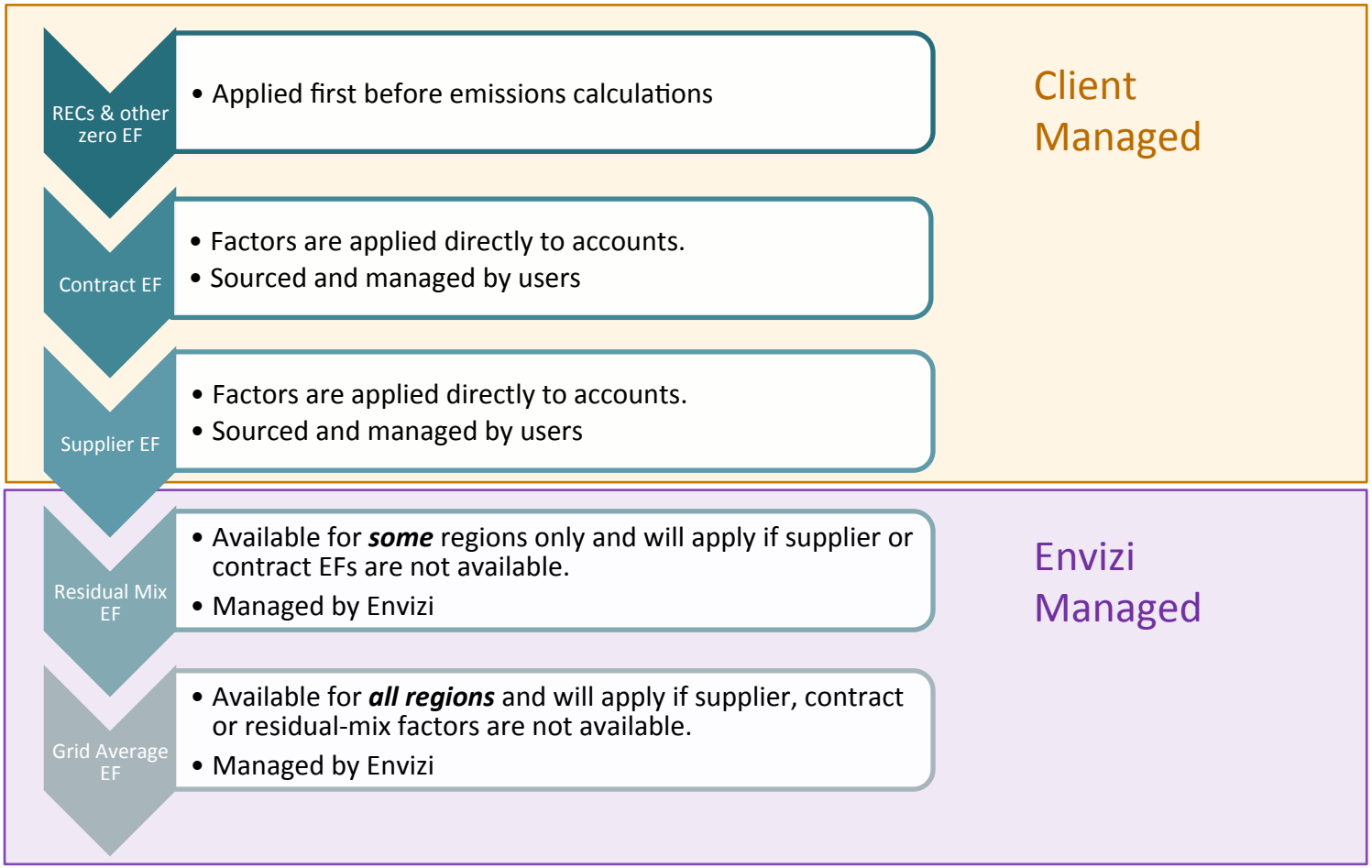
- Support extensive data types
- Configured to align with billing formats - combined or separate



Anthesis

enVizi

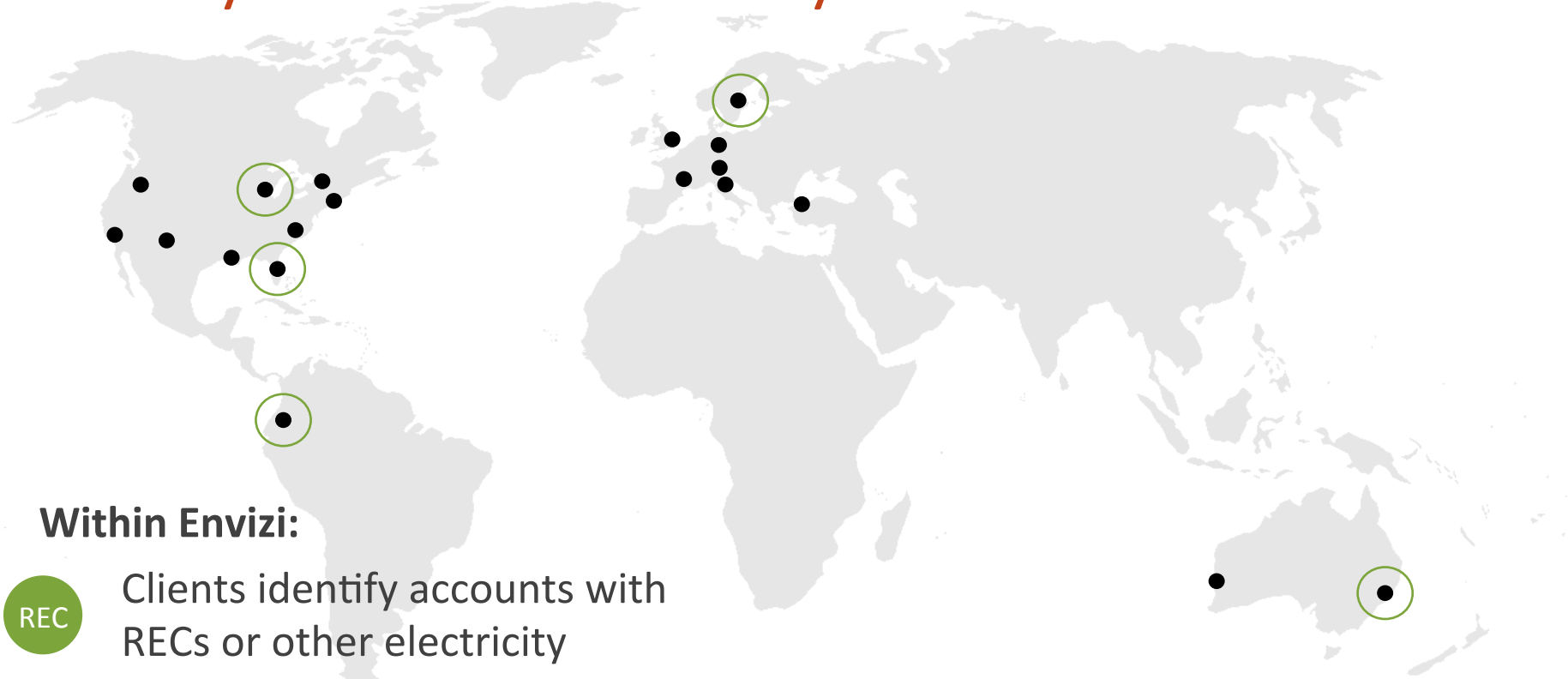
Market-Based Emission Factors in Envizi



Anthesis

enVizi

Step 1:
Identify sites with electricity attribute certificates



Within Envizi:

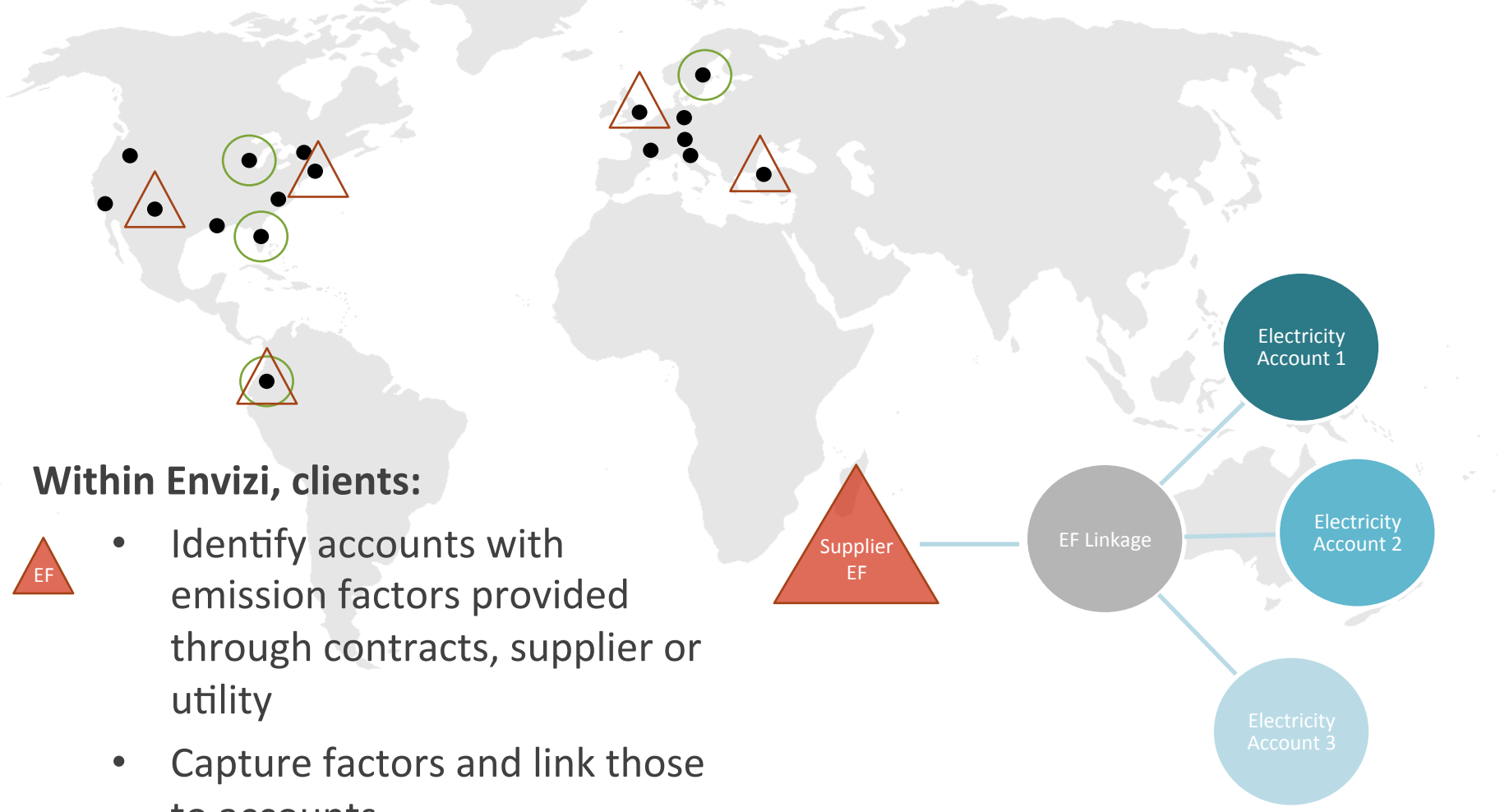
REC

Clients identify accounts with RECs or other electricity attribute certificates that will use a zero emission factor.

Anthesis

enVizi

Step 2:
Source other market-based factors



Within Envizi, clients:

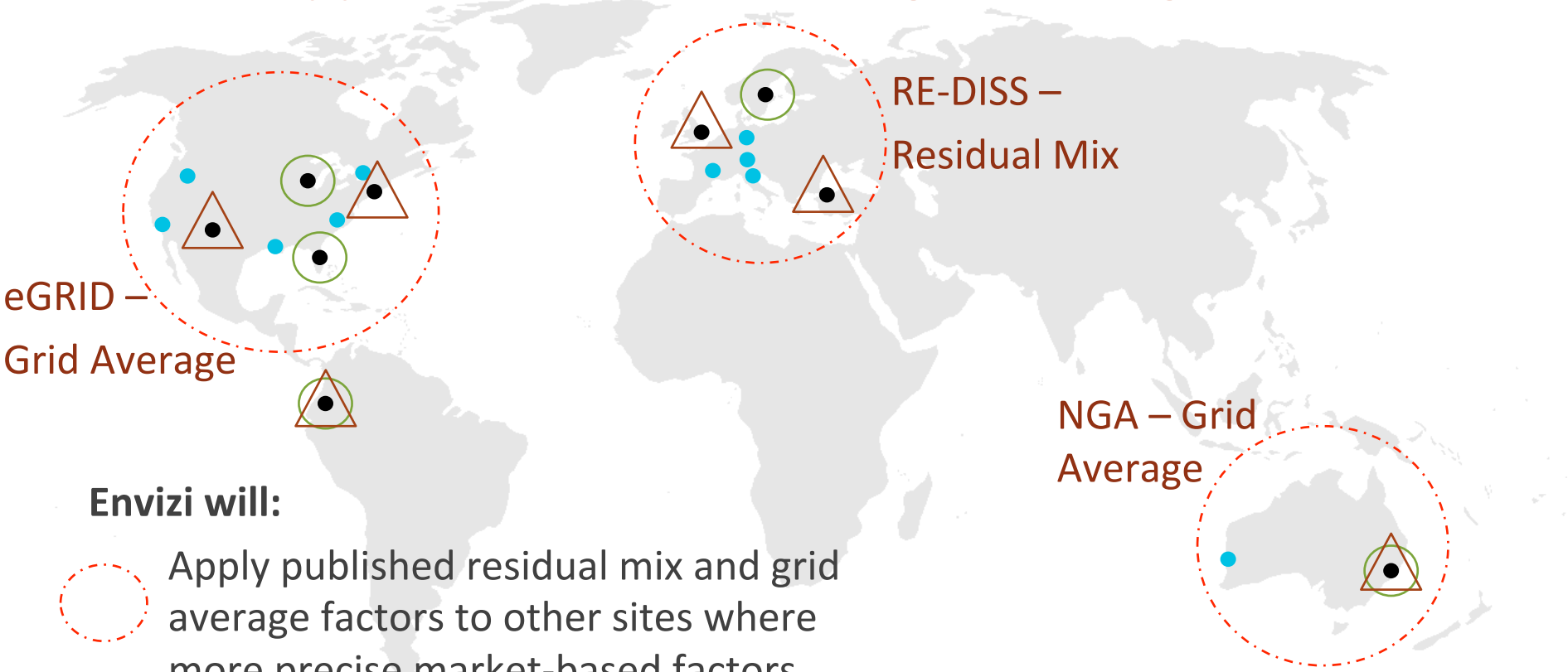
EF

- Identify accounts with emission factors provided through contracts, supplier or utility
- Capture factors and link those to accounts

Anthesis

enVizi

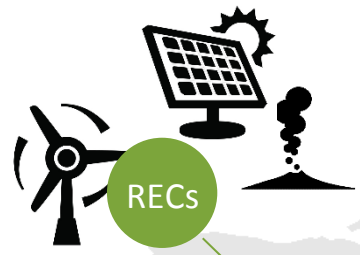
Step 3:
Envizi applies residual-mix and grid-average factors

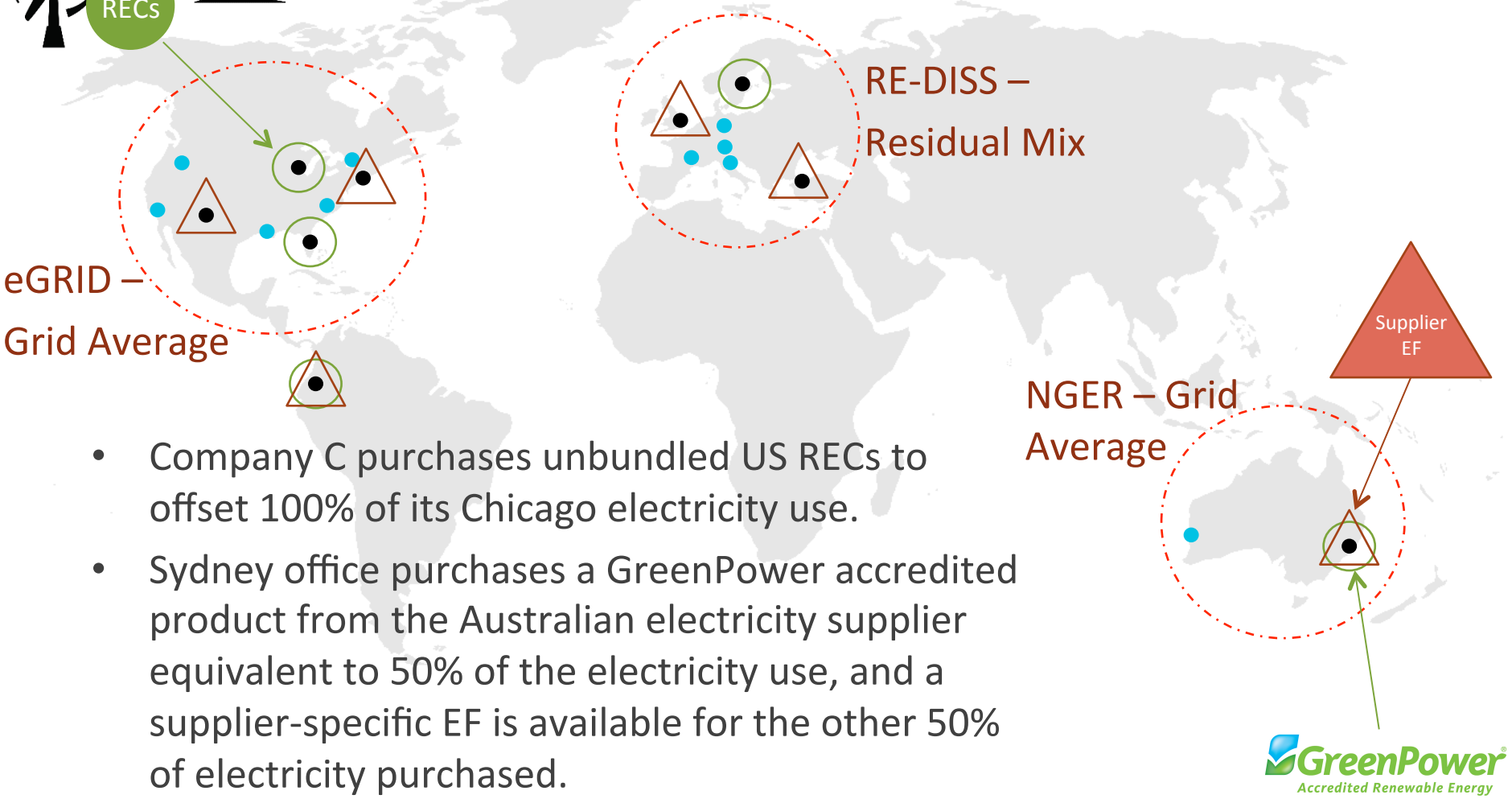


Envizi will:

Apply published residual mix and grid average factors to other sites where more precise market-based factors are unavailable

Worked Example





- Company C purchases unbundled US RECs to offset 100% of its Chicago electricity use.
- Sydney office purchases a GreenPower accredited product from the Australian electricity supplier equivalent to 50% of the electricity use, and a supplier-specific EF is available for the other 50% of electricity purchased.

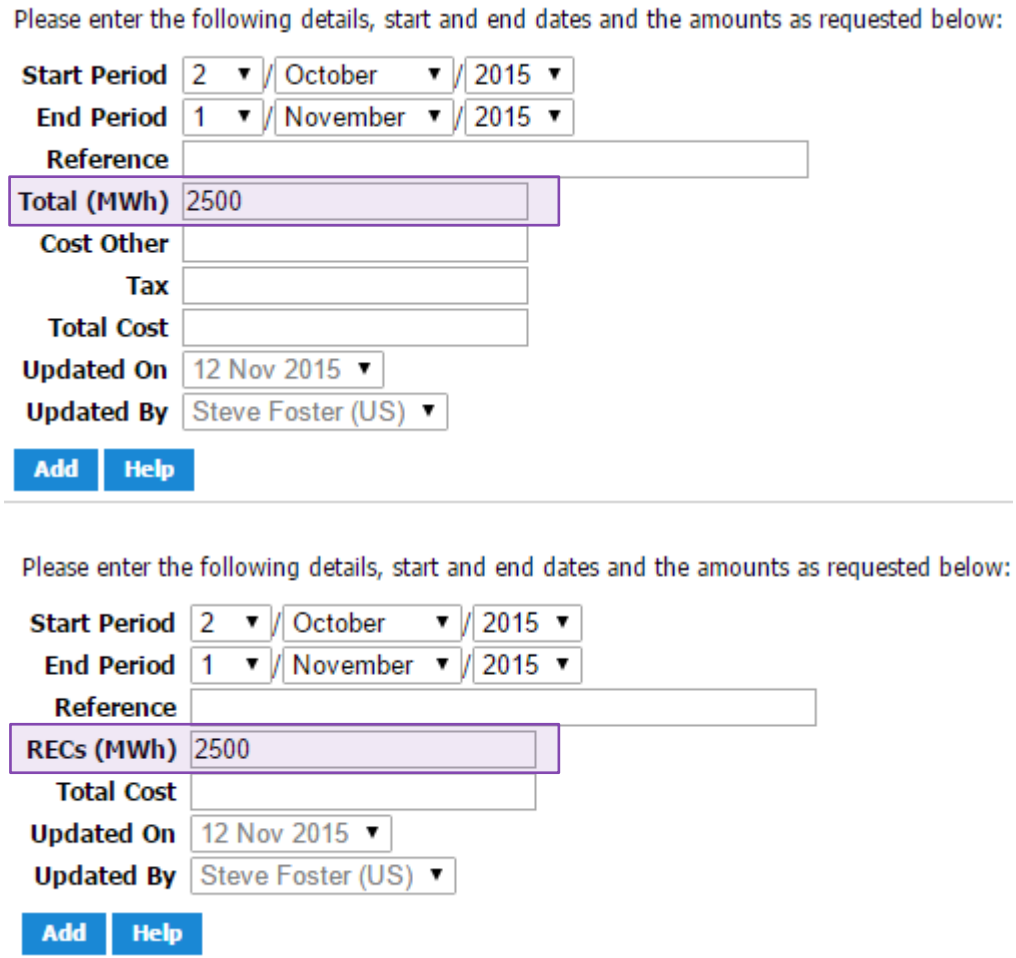
Anthesis

enVizi

Capturing Electricity Data

RECs and other zero EF electricity attribute certificates

- Accounts where RECs (or other zero EF electricity attribute certificates) are purchased *separately*



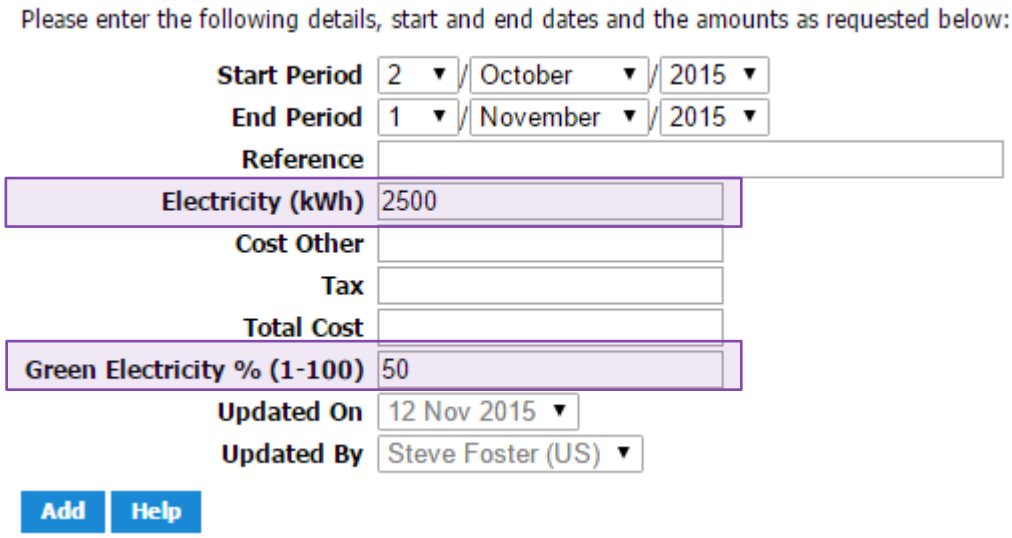
Anthesis

enVizi

Capturing Electricity Data

RECs and other zero EF electricity attribute certificates

- Accounts where electricity consumption and RECs (or other zero EF electricity attribute certificates) are invoiced *together*



Anthesis

enVizi

Tracking and Reporting - Performance and Goals Progress

- Will you report similarly internally and externally, i.e. will two emission values confuse your internal data providers?
- How is your company planning to meet its GHG goal, i.e. via location- or market-based method? Or will you have two goals – one for each method?
- How have you been calculating your progress against renewable energy goals to date? Has it been a hybrid of location- and market-based methods (i.e. renewables in the grid and voluntary purchases)? Your renewable energy goal should align with location-based or market-based method.
- How far back is your goal base year? What method will you use to recalculate your goal base year if it will be reported against market-based method?
- How far back do you report historical emissions (e.g. on your website, in sustainability reports)? Will you try to recalculate historical emissions via market-based method or just add market-based emissions going forward?

Q&A

– Josh Whitney, Partner
josh.whitney@anthesisgroup.com

– Sophia Traweek, Partner
sophia.traweek@anthesisgroup.com

– Tanya March, Envizi
tanya.march@envizi.com

– Steve Foster, Envizi
steve.foster@envizi.com

Anthesis

enVizi

Webinar Series – Part 3

- February 2016 TBC: Part 3 on CDP & Reporting with CDP

Thank you!

Anthesis