





# Credits Trading

What Do You Need to Participate in the Carbon, REC, and White Tag Markets?

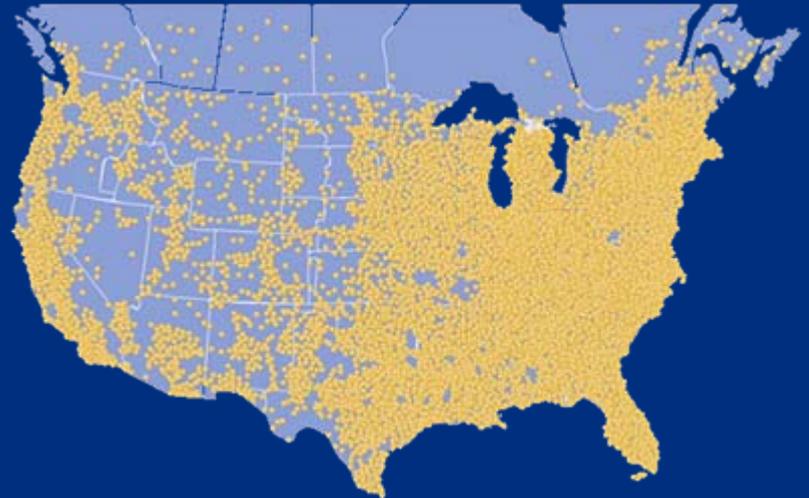


**GovEnergy**  
[www.govenergy.gov](http://www.govenergy.gov)



# Advantage IQ, Inc. Corporate Overview

- We currently manage over \$12.3B in expenses for 450+ clients
- In the last two years, we have saved our clients more than \$149 million in expenses
- We currently process and pay over 660,000 bills/month supporting more than 210,000 sites nationwide
- Headquartered in Spokane, WA with offices in Cincinnati, Denver and Atlanta - employing over 600 people
- Leaders in providing energy management and sustainability services for multi-site customers





# Corporate Social Responsibility & Environmental Stewardship

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## Why Businesses are Turning Green

- **Positive PR/Marketing Opportunities** – Create positive publicity and enhance your company's corporate image
- **Employee Retention and Growth** – Companies want to be viewed by employees and prospective employees as a workplace that is forward-thinking, involved, and attempting to make a difference
- **Financial Risk** – Investors are becoming concerned about corporate environmental liabilities and how they impact shareholder value
- **Customer Pressure** – Companies must live up to their customers' expectations for corporate responsibility and green business practices or face significant brand erosion and lost business
- **International Corporate Interests** – Companies that are domestic divisions of foreign parents are being driven to track and mitigate their environmental footprint as standard practice



# Carbon Market





# Why Report GHG Emissions?

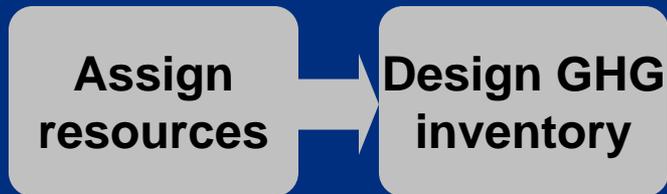
## Five Business Goals:

- Manage GHG risks & identify reduction opportunities
- Public reporting & participation in voluntary programs
- Participation in mandatory reporting programs
- Recognition for early voluntary actions
- Participation in \$100+ Billion GHG market

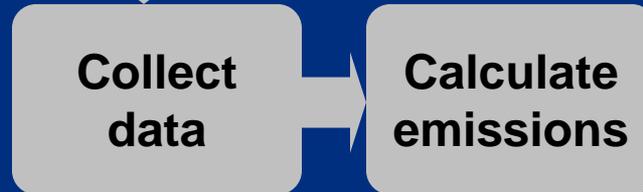


# Continuous Improvement & Iteration

## PLAN



## DEVELOP



## Step by Step Emission Reporting

## MANAGE



# Details of GHG Reporting Calculations

**Design GHG  
inventory**

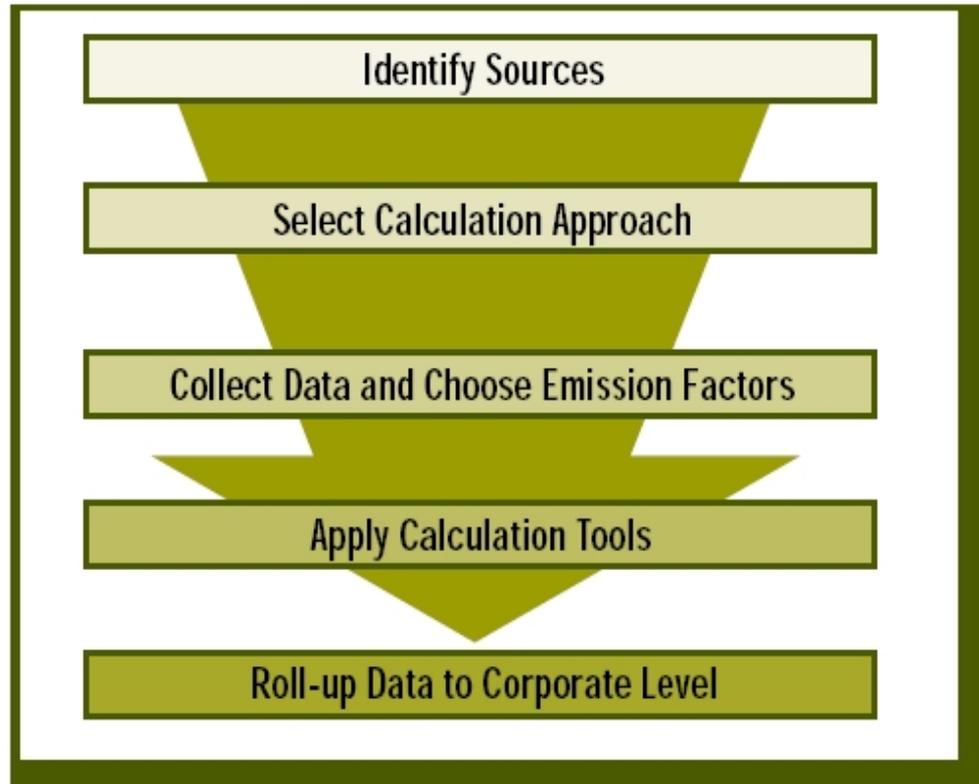


**Collect  
data**



**Calculate  
emissions**

## Steps in identifying and calculating GHG emissions





# How to Use This Information

## Step 1

- Calculate your Carbon Footprint & Set Emission Reduction Targets
- Establish Corporate Carbon Strategy

## Step 2

- Purchase/sell CO<sub>2</sub> Offsets thru Auctions, Exchanges, Brokers, Developers
- Purchase RECs for Carbon Content
- Develop Carbon Offset Projects

## Step 3

- Join Organizations such as CMC, CCX, IETA, TCR, EPA Climate Leaders



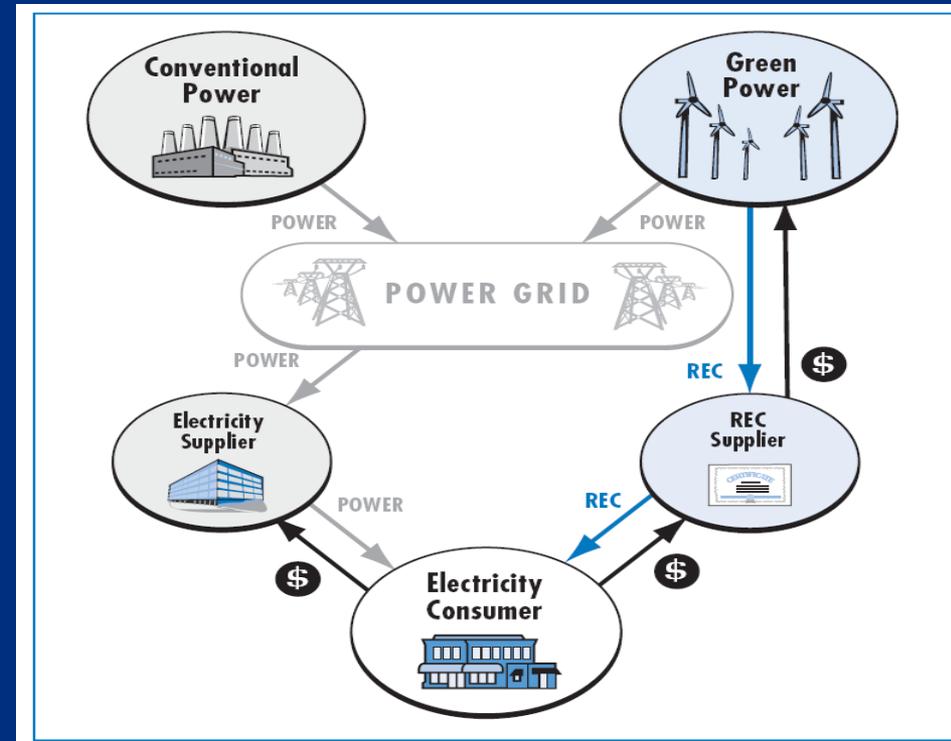
# REC Market



# Renewable Energy Certificates

## RECs

- Each REC represents the environmental attributes resulting from the generation of 1 MWh (1,000 kWh) of electricity by renewable energy generators
- These environmental attributes are used to offset or reduce the pollution impact of an equivalent amount of electricity generated from the sources used to generate typical system power, such as coal





# Factors To Consider When Purchasing RECs

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## 1. Purchase Requirements

- Determine the breadth of your purchase.
- Will it be for a single facility or organization-wide?
- What are your budget or geographical constraints?
- How does the opening and closing of facilities affect your offset percentage?

## 2. Contract Term

- Consider the length of your purchase contract and how it fits into your overall renewable energy strategy.
- Another issue is that, considering the limited amount of renewable energy available, the cost of RECS could rise significantly over the long term.

## 3. Sourcing Options

- There are multiple options for sourcing RECs; including: direct sourcing from generators, national RECs suppliers, utility programs, auction platforms and retail electric providers.
- In any case, it is important to competitively source your RECs to ensure the best possible product and pricing.



# Factors To Consider When Purchasing RECs

## 4. Generation Source

- The primary sources of renewable energy are wind, solar, biomass, and hydro.
- There are pros and cons associated with each of the various renewable energy sources.
- Depending on your organization's goals (financial, environmental, or other) you may seek a specific resource mix.
- You might also base your purchase on the cost, geography, or carbon benefit afforded by the product mix.

## 5. Pricing

- The cost of renewable energy varies widely based on product selection (i.e., wind vs. solar, certified vs. non-certified RECs, etc.)
- Price can be influenced by generation source, geography, and vintage.
- There is no established market clearinghouse for REC pricing.
- Prices are largely expected to rise over time.



# Factors To Consider When Purchasing RECs

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## 6. Certification of RECs

- Recommend purchasing green power products that are certified and verified by an independent third party, such as Green-e.
- Buying certified and verified products helps ensure the quality of your purchase and the integrity of your renewable energy program.
- Certified products are generally preferred by the EPA when registering for Green Power Partnership recognition.
- Purchasing certified RECs establishes credibility with your customers and environmental groups that monitor RECs purchases.

## 7. Environmental Integrity

- Be mindful of your overall strategy when considering the purchase of renewable energy.
- Does your RECs purchase effectively address your overall environmental stewardship goals?
- How will your renewable energy strategy (and RECs purchases) be regarded by your customers, shareholders, employees, and the public at-large?



# Renewable Energy Procurement Services

## WHAT TYPE OF ASSISTANCE TO LOOK FOR FROM A THIRD PARTY

### Market Information Services

- Ongoing Assessment of RECs Supply Options
- Evaluate Utility and Supplier-Based Programs
- Evaluate Market Opportunities
- Complete EPA Documentation
- Analyze Buy/Sell Options

### RFP and Supplier Services

- Review Existing Renewable Contracts
- Obtain Historical Consumption Data
- Solicit Pricing and Evaluate Bids
- Support Contract Negotiation



# How to Use This Information

## Step 1

- Calculate and Report on Energy Consumption and Baseline Values
- Establish Renewable Energy Strategy

## Step 2

- Purchase RECs thru Auctions, Wholesalers, Brokers, & Generators
- Develop Renewable Energy Projects

## Step 3

- Marketing and PR Efforts such as EPA Green Power Partnership



# White Tag Market



# White Tags

## White Tags

- Each White Tag represents the environmental attributes resulting from energy conservation efforts to reduce consumption and equal to 1 MWh (1,000 kWh) of electricity
- White Tags can be sold into the appropriate compliance market which have energy conservation requirements
- Key Note: If you sell your White Tags, the environmental benefits are sold with it. That is, you lose your Carbon Reductions



# Corporate Energy Efficiency Programs

- Should be a major part of your Corporate Sustainability Strategy
- Proven, cost effective, and relatively easy
- Positively affects financial bottom line immediately
- Financial payback of 1 to 2 Years
- Significantly reduces carbon footprint
- Logical complement to purchasing RECs and/or installing onsite renewable electricity generation
- White Tags can be monetized to increase cost effectiveness



# Energy Consumption Savings

## Estimated 10-15% Savings on Overall Energy Spend from:

- Lighting Re-Design, Retrofit and Re-Lamping
- Daylight Harvesting
- Improved HVAC Efficiency and Diagnostics
- Enhanced Building Automation
  - Matching System Operation to Occupant Schedules
  - Optimizing Value from Existing Control Systems
  - Integrating Systems to Assure Synergies (less lighting = less cooling)
- Improved Building Design



# Develop an Energy Conservation Program Plan

Deliver an executable business case portfolio wide with implementation that includes:

- Energy Benchmarking Analysis
- Facility Assessment
- Detailed Plan for the implementation of a corporate wide energy conservation program including financial analysis



# Implement and Manage the Program Plan

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- Manage material and service vendor selection, contracts, billing, and daily issues
- Provide program updates through weekly calls and a customized on line dashboard
- Validate savings by actual equipment load measurement, prescriptive equipment analysis and invoice data
- Identify and administer energy rebates
- Participate in the White Tag market



# How to Use This Information

## Step 1

- Collect data on Energy Consumption and Baseline Values

## Step 2

- Develop an Energy Conservation Program
- Implement and Manage your EC Program

## Step 3

- Participate in the White Tag Market



# For More Information

Would you like to know more about this session?

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Don't forget to fill out and drop off your session evaluations!