

# ICT Solutions - Carbon Strategies

Enabling the Double Dividend

**ClimateCHECK**  
SET THE STANDARD™



**Presented By:**

**Tom Johnson**  
VP of GHG Management Solutions  
ClimateCHECK

**Presented To:**

**Saving the World: The Greening of IT**  
**Powering Innovation: A National**  
**Summit**  
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# Innovative GHG Management Solutions™

## Who is ClimateCHECK?

- A values-driven GHG measurement and management service provider with an established track-record in climate change and clean tech markets across every sector and all facets of the carbon markets

## What does ClimateCHECK do?

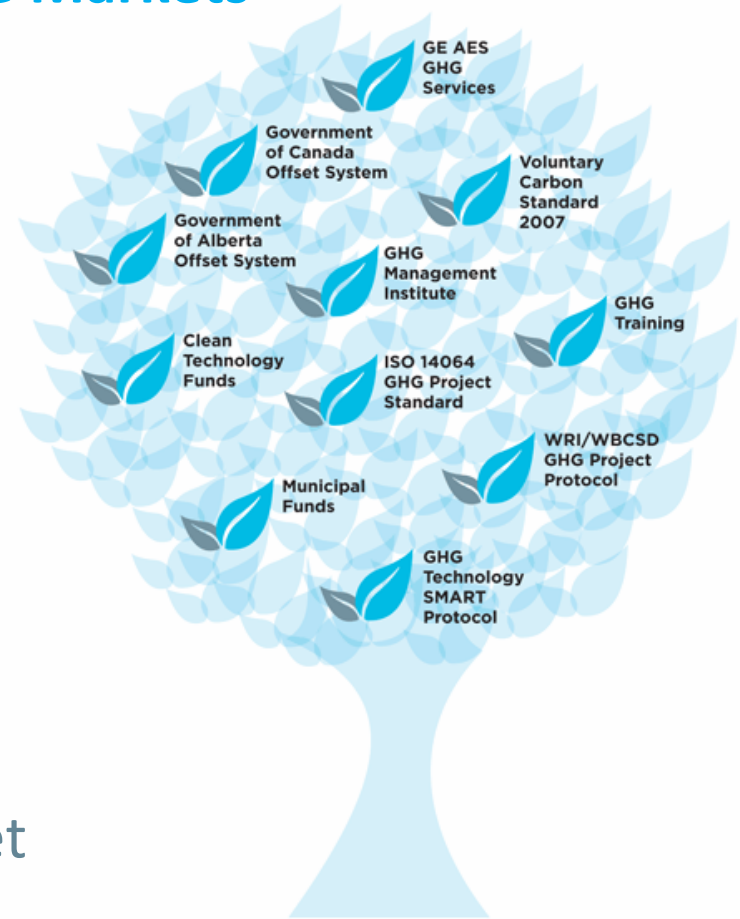
- Create end-to-end business and market infrastructure solutions → GHGMI, ISO 14064 GHG credit standard
- Enable clients to **identify returns**, develop **executable plans**, and gain **strategic advantage** for **leadership** in their sector



# Set the Standard™

## ClimateCHECK Contributions to GHG Markets

- **Main Author of ISO 14064 Part 2**  
GHG Standard for Projects
- Major Contributor to WRI-WBCSD  
GHG Protocol for Projects
- **Completed over 300 assignments**  
clean tech, protocols, training,  
corporate inventories, carbon-  
neutral products, management  
handbooks, carbon disclosure,  
verification, validation, CDM, offset  
origination, end-to-end solutions



## KEY MARKET METRICS

**\$500 billion - Value of low-carbon energy markets by 2050**

**\$100 billion - Demand for projects generating GHG emissions credits by 2030**

**\$100 billion - Worldwide investment in clean energy by 2009**

**\$84 billion - Cumulative net savings from energy efficiency in US by 2012**

**Global carbon market expected to grow 58% in 2008 to \$92 billion**

**Voluntary carbon market expected to grow to \$5 billion by 2013**

**\$57 trillion - Carbon Disclosure Project signatories, 1000s of companies participating, expanding to supply chain accounting**

**Every organization will need GHG solutions – plan and execute a strategy to achieve double dividend business and environmental benefits**

# The Case for Green IT

## What is “Green”?

- Something that is “green” or sustainable addresses:

Energy Consumption	Waste	Transport
Land	Air/Water Emissions	Social Inequities

## Drivers for Green IT

- Technology options improving economic returns and operational efficiency
- Environmental/social responsibility procurement policy
- Preparing for anticipated regulation
- **Carbon is the corporate DNA for sustainability**



# Green IT Considerations

- ✓ **Bottomline driven:**
  - Be prepared to demonstrate the “green” benefits in the bidding and implementation phases
- ✓ **Corporate Risks:**
  - Client “greenwashing” by self reported analysis – require 3<sup>rd</sup> party validation
- ✓ **Corporate Opportunity:**
  - Utilize GHG domain expertise to qualify and quantify emissions reductions associated with the IT solutions
  - Market and brand recognition results in increased market share & client loyalty
  - Competitive advantage – Market differentiator
- ✓ **Corporate Benefit:**
  - Capitalize on the carbon opportunity by demonstrating the emission reductions of your solutions



# Carbon Primer

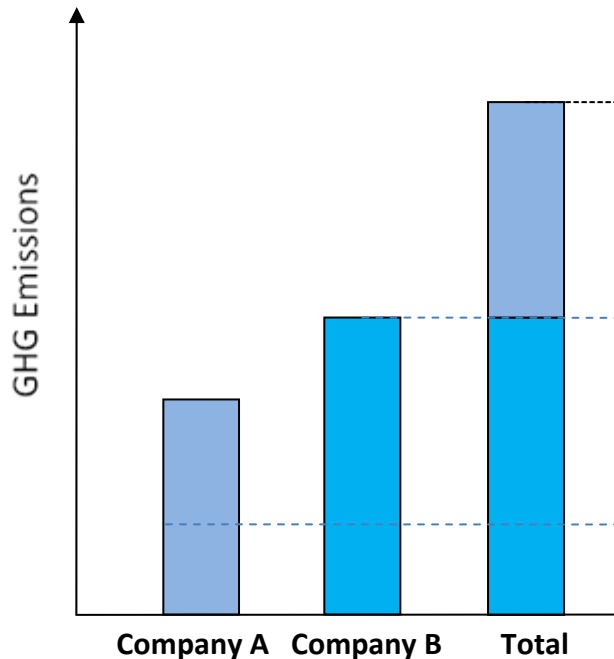
- In general, there are two types of emission trading schemes:
  - **Cap and Trade**
  - **Baseline and Credit**
  
- Emission trading schemes can be:
  - **Regulated** (mandated by a government or regional authority)
  - **Voluntary** (entered into on an individual transaction basis, or through ongoing contractual arrangements)



# Cap and Trade

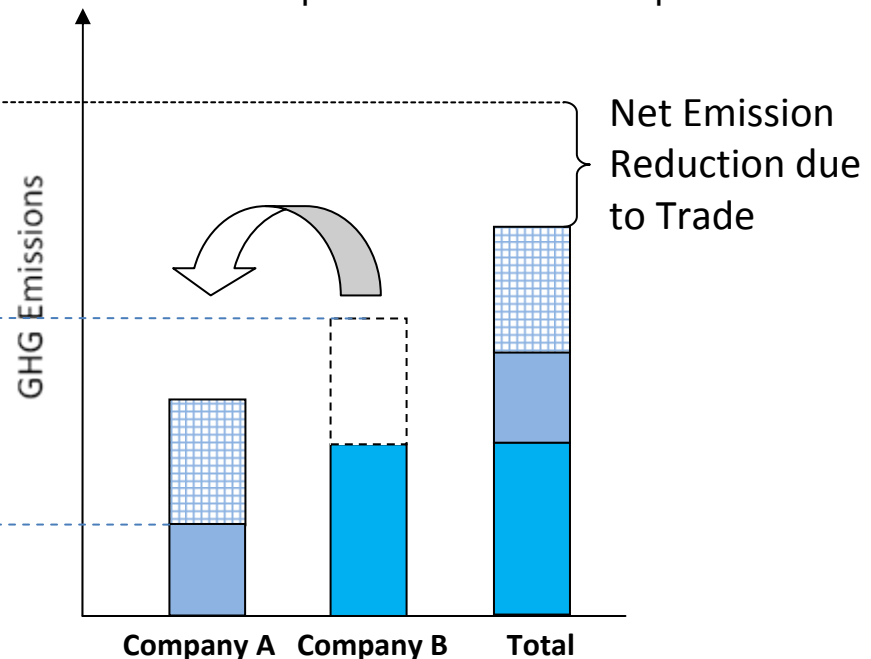
## Regulated Markets – Closed System

**Before Carbon Trading  
(Baseline year)**



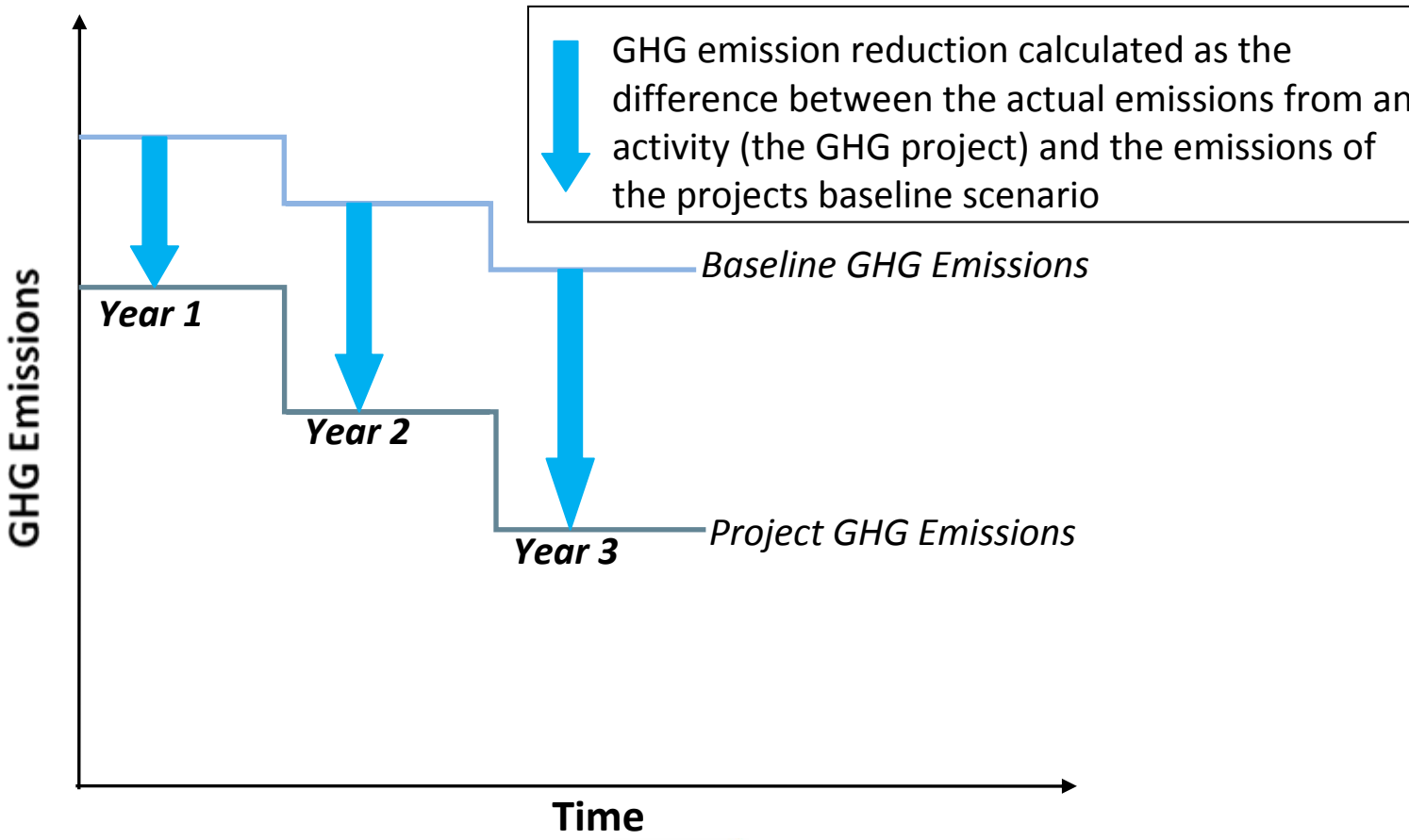
**After Carbon Trading  
(Future year)**

Company B implements an internal GHG reduction activity and sells permits to Company A, which uses the permits to meet its cap



# Baseline and Credit

## Voluntary and Regulated Markets – Open System



# Baseline and Credit

- GHG projects create credits by either:
  - Reducing the amount of GHG emissions released to the atmosphere from one or more GHG sources, or
  - Increasing the amount of GHG removed from the atmosphere.
- Credits are purchased by emitters in voluntary markets for reasons including corporate social responsibility, green branding, and carbon neutral product claims



# Credits and Permits and Offsets – oh my!

- GHG emission reduction projects and GHG emission removal enhancement projects generate **carbon credits**
- Cap and trade schemes result in **permits** or **allowances** that are traded on a regulated market
- When credits are interchangeable (i.e., fungible ) with emission permits, such credits are strictly speaking **offsets**
- ...but “offsets” has come to be used interchangeably with “credits”

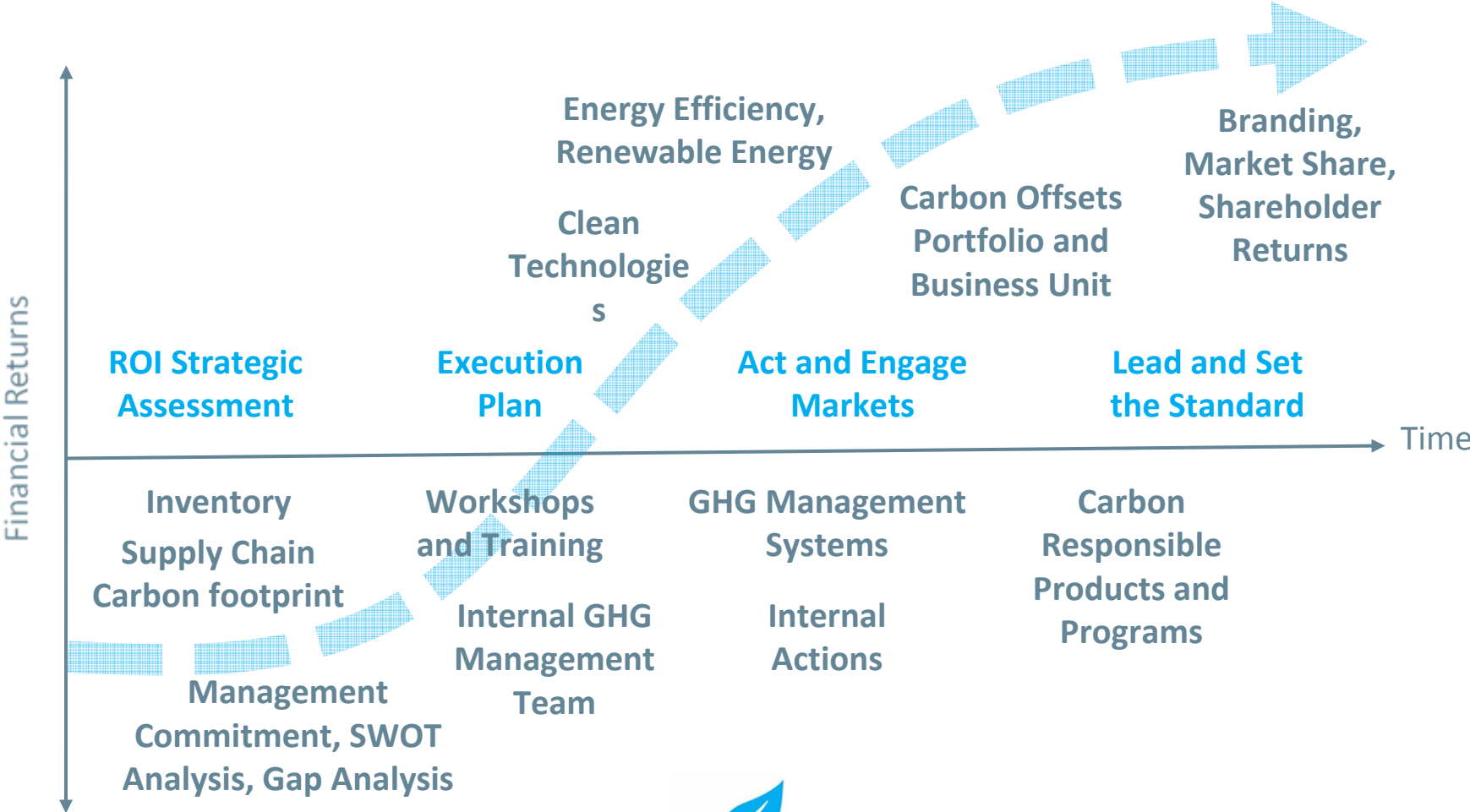


# GHG Management Issues

- Have you/your clients assessed your GHG risks and opportunities?
- Have you/your clients quantified and **verified**:
  - GHG inventory? Scope 1 - 2 - 3? Supply chain?
  - Internal opportunities (energy efficiency, fast ROIs)?
  - GHG business opportunities in your market (products, technologies)?
- How do you plan to deliver GHG benefits and get returns?
  - Integrated end-to-end business strategies and solutions
  - Strategic assessment, protocols/plans, training, management & QA/QC, audit, transaction
  - WRI-WBCSD GHG Protocol, ISO 14064, other approaches



# GHG Management Process



# Case Study:

## Greenhouse Gas Services LLC – a GE AES Venture



- Major GHG credit business providing end-to-end operation and commoditization services
- Based on hybridized standards (ISO 14064, WRI, CDM, EPA)
- Compatibility with GHG project programs (CCAR, VCS, Government of Canada Offsets System)
- Strategic guidance
- Quantification and verification system design and facilitation, protocol development
- Training → Greenhouse Gas Management Institute
- Google is working with GHGS for high quality GHG credits



# Executing The Carbon Advantage

Requires Knowledge and Expertise for:

- Understanding and use of international best practices for greenhouse gas measuring, monitoring, and reporting
- Understanding of your clients green needs and opportunities
- Robust business modelling to aggregate, engage clients with rewards, execute monetary transaction

ClimateCHECK defines the strategy and implementation plan for **double dividend** returns, economic and environmental





Carbon Saved



Money Earned.

**Tom Johnson**  
VP of GHG Management Solutions  
ClimateCHECK



**O: +1 416-551-0511**  
**M: +1 647-236-5935**  
**E: [TJ@Climate-CHECK.com](mailto:TJ@Climate-CHECK.com)**