



Greenhouse Gas Services, LLC

a GE AES venture

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Real carbon solutions
from a source you can trust



Challenges & Opportunities

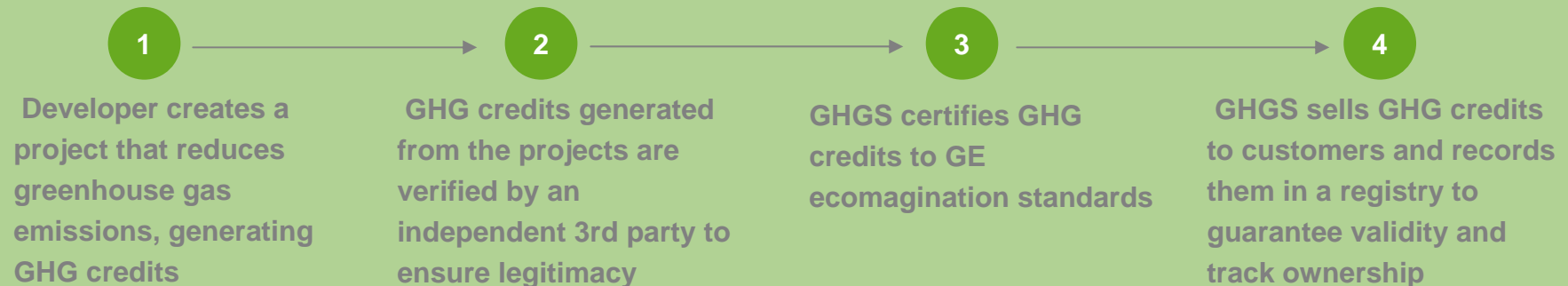
- Transition to large-scale GHG credit market
- Agreement on the role of standards
- Criteria for quality
- Mechanisms for interoperability
- Mechanisms for liquidity
- A highest common denominator platform for standards and protocols ensuring scientific and environmental integrity
- Competition to provide quality and product enhancements
- Policy maker recognition of and focus on sustainable voluntary markets as complement and corollary to compliance regimes



Understanding credits is a vital first step

- Greenhouse gases, such as carbon dioxide, methane and nitrous oxide, contribute to climate change.
- 1 greenhouse gas credit = 1 carbon offset = 1 metric tonne of CO2 equivalent (CO2e) reduced, avoided or destroyed.
- Examples of projects that generate carbon offsets are landfill, coal-mine and/or agricultural waste-methane capture and destruction, renewable solar or wind energy, and energy efficiency projects.

How do Greenhouse Gas Services' GHG Credits Work?



Why Greenhouse Gas Services?

A trusted source of high-quality GHG credits & carbon management solutions



GE Energy Financial Services

- ✓ \$17 billion in energy investments
- ✓ \$3 billion+ in renewable energy projects

AES Corporation

- ✓ 20% of global portfolio in renewables
- ✓ Significant carbon market experience
- ✓ First carbon offset project in late 1980s

GE ecomagination product

- ✓ GE's commitment to provide products and services that generate significant environmental and economic performance advantages to GE's customers.

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- Top notch brand backed by GE ecomagination
- Proprietary GHG credit standards, practices and technologies
- Deep project development and financing experience
- Significant carbon market expertise
- Ability to create market scale
- Execution focus



Key Aspects of the Standard

Additional. Projects must not be required by law or common industry practices; they must go beyond business as usual

Real. Projects are 3rd-party verified to ensure they result in a real and quantifiable reduction in greenhouse gas emissions

Durable. Projects must result in permanent physical reductions in GHG emissions or, if not permanent, ensure delivery of promised reductions

Independently Verified. Each GHG credit must be verified by a qualified independent third party, retained by Director, Stds. & Practices

Compatible. Our standard was designed on the basis of ISO 14064 and crafted to maximize compatibility with other such GHG standards

Transparent. Project data are disclosed, including project summaries, verification reports and certification reports

Informed. Our standard was developed in consultation with a wide variety of external partners



Diversified portfolio of GHG credits

- GHGS mitigates risk through a highly-diversified portfolio of projects of different size, technology and geographic location
- Current portfolio has **25 projects** under review; **25,000 to 700,000 GHG credits** each; in **12 US States**

Methane capture and destruction from agricultural waste sites, landfills, coal mines and waste water treatment sites



Renewable energy projects that reduce the need for new fossil fuel power plants by creating new renewable sources of energy



Energy efficiency projects at industrial, commercial and residential sites using energy efficient lighting and other technologies and techniques



Forestry and land management projects to plant trees and improve land management to increase the capture and retention of carbon dioxide



Industrial gas destruction projects that capture and destroy gases such as N₂O and SF₆ through alternative equipment and new industrial processes

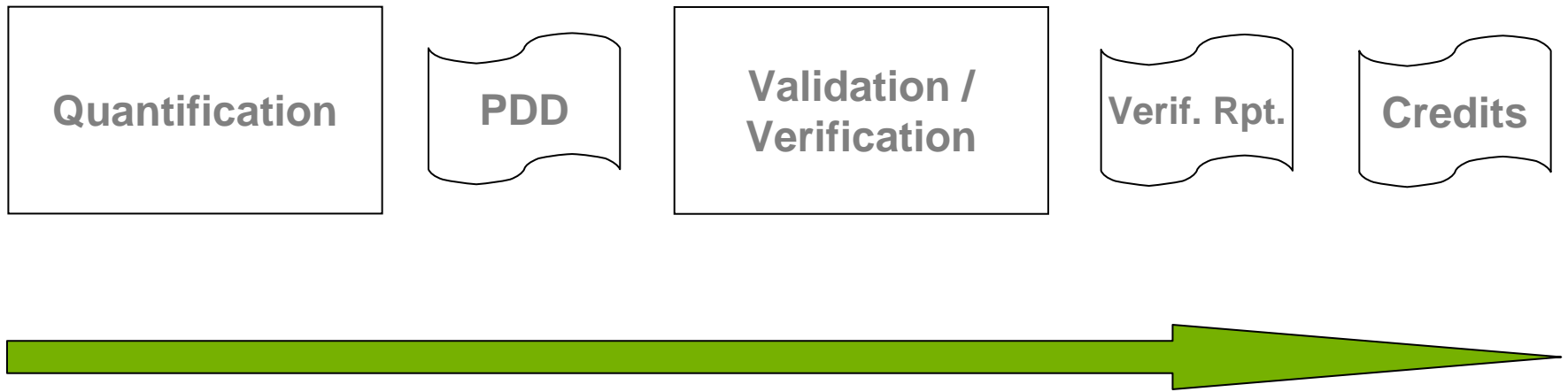


Which Standard to Use?

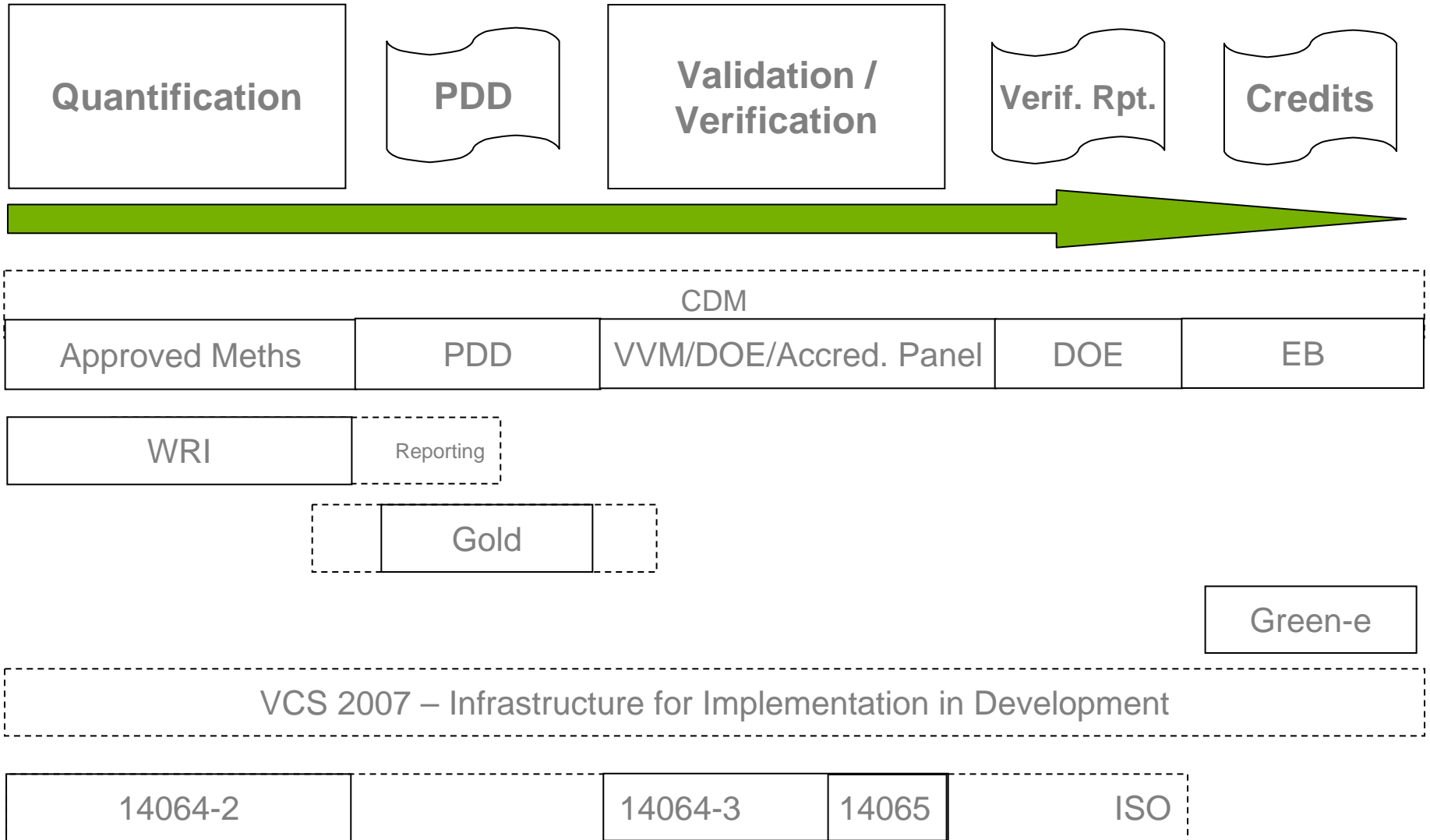
- 3d Party Control
- CDM
- CDM dependence
- ISO
- Scope
- *De facto v. de jure*
- Transparency
- Completeness



Basic Structure of Process



Roles of Standards



Issues with a New Standard

- Development costs
- Implementation benefits
- Conformance
- Perception
- Internal pressures
- Endorsement



Core Concepts

- Greenhouse Gas Credit claims must be **Substantiated***
- Greenhouse Gas Credits must have **Environmental Integrity**
- Greenhouse Gas Credits must have **Scientific Integrity**

* See, e.g., 16 CFR pt. 260



Our Approach

Substantiation



Standard of Practice

Environmental
Integrity



Voluntary and Additional
(Surplus to requirements &
business as usual)

Scientific
Integrity



Quantification & Verification
Methodologies, verification
requirements



Design Elements & Features

- Replicability
 - Objectivity
 - Speed
 - Consistency
- Allocation of Responsibilities
- A ***Voluntary*** Market Standard
 - Ask: Does the requirement add to the quality of the credit?***
 - No Financial Additionality Test
 - No 3d Party Validation Requirement
 - No Stakeholder Consultation Required
 - No “Improvement of Capacity for Sustainable Development” Requirement
 - No “Flow of Funds” Requirements



Design Elements & Features

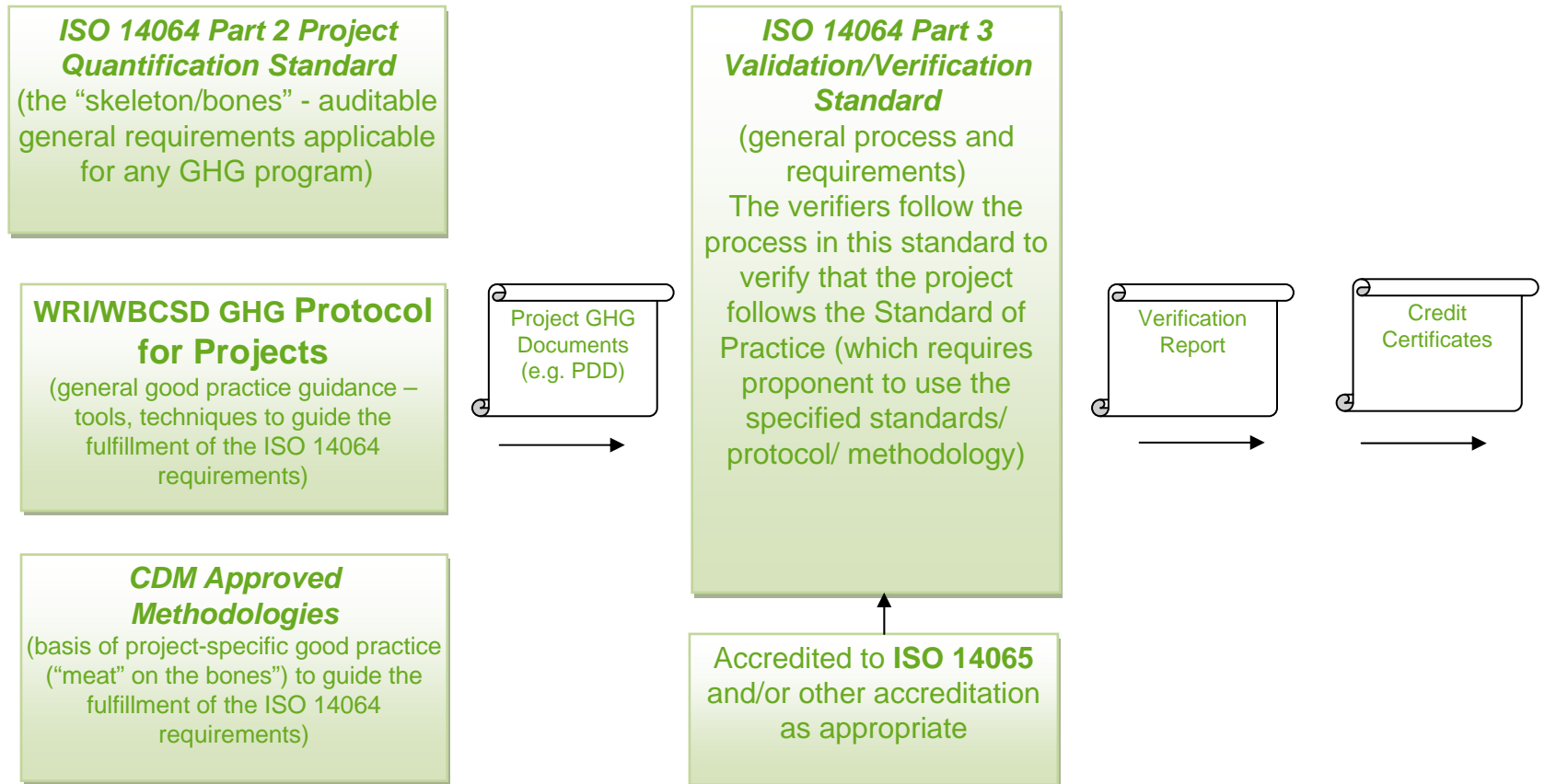
- Use Recognized Experts/Practitioners to Author Meths
- Meths Designed for Use by All Projects in a Category
- No Baseline Calculation for most Methane Destruction
- Use of Simplified Methodology Options
- Risk-Based Verification
- Batch Verification
- Verifier Retained by Standard of Practice Manager (not Project Developer)



Our Approach

Greenhouse Gas Services, LLC Standard Code of Practice

Framework rules, principles, and overall process for project proponents and verifiers on how to coordinate application of ISO 14064, WRI/WBCSD GHG Protocol for Projects, CDM AMs and other standards/protocols to result in fungible GHG credits with scientific and environmental integrity.



Preamble

Greenhouse Gas Services, LLC establishes and adopts this standard of practice for the production, management, and marketing of greenhouse gas credits (“GHG credits”).

Greenhouse Gas Services’ GHG credits will provide the same reduction in the concentration of greenhouse gases in the atmosphere as reducing direct emissions from sources such as commercial and industrial activities and operations.



Methodologies (Protocols)

- LFG, CMM, WWTP available
- Ag Waste, EE, Reforestation in development
- CHP, Industrial gases to be determined
- Each Meth is supported by a suite of tools/templates
 - Guidance document (Std of Prac)
 - Eligibility
 - Monitoring, recordkeeping, reporting summaries
 - Quantification spreadsheet
 - Verification template
 - Other docs as necessary



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