



Carbon Accounting – Some of the Terms

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Carbon Accounting – Some of the Terms

- Primary source:
Carbon Accounting:
A Practical Guide for Lawyers

Peter L. Gray and Geraldine E. Edens,
Natural Resources & Environment,
volume 22, no. 3 (Winter 2008)



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Carbon Accounting – Some of the Terms

- Accounting standards are necessary to ensure that GHG emissions reductions are transparent, representative of actual reductions, verifiable, permanent, and enforceable
- Several systems are emerging, including –
 - World Resources Institute/World Business Council for Sustainable Development *GHG Protocol for Project Accounting*
 - ISO 14064 Part 2



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Carbon Accounting – Some of the Terms

- Greenhouse gas (GHG) project –

An activity or set of activities intended to
 - reduce GHG emissions,
 - increase carbon storage, or
 - enhance GHG removals from the atmosphere



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Carbon Accounting – Some of the Terms

- Basic steps in carbon accounting –
 - Identify project alternatives
 - Identify primary effects
 - Consider secondary effects and evaluate their significance
 - Develop a baseline scenario
 - Monitor project activity emissions
 - Quantify GHG reductions



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- Primary effect – the intended change in emissions caused by a project activity
- Secondary effect – the unintended change in emissions caused by a project activity –
 - Additional reductions (positive)
 - Additional emissions (negative)



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- Baseline scenario –
hypothetical description of what would
have most likely occurred in the absence
of any consideration about climate change
mitigation
 - “business as usual”
 - or the use of alternative technologies or
practices that could provide the same product
or services as the GHG project activity



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- Additionality –
Changes in GHG emissions, reductions, or
capture that are not “additional” to what
otherwise would have occurred, regardless
of the GHG project
 - No precise way to determine this
 - Three tests for additionality –
 - Legal and regulatory
 - Financial
 - Common practices



Carbon Accounting – Some of the Terms

- Monitoring GHG emissions from a project activity
 - Direct measurement
 - Calculation methods (e.g., extrapolation from fuel consumption data)

Use conservative estimates to adjust for uncertainties

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Carbon Accounting – Some of the Terms

- Quantification of GHG reductions
 - Ex ante estimates, predictions over time
 - Ex post, using actual monitoring data once the GHG project has been implemented

Emerging international trading rules and national laws will probably require some form of independent verification

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CO₂ reductions from energy efficiency and renewable energy

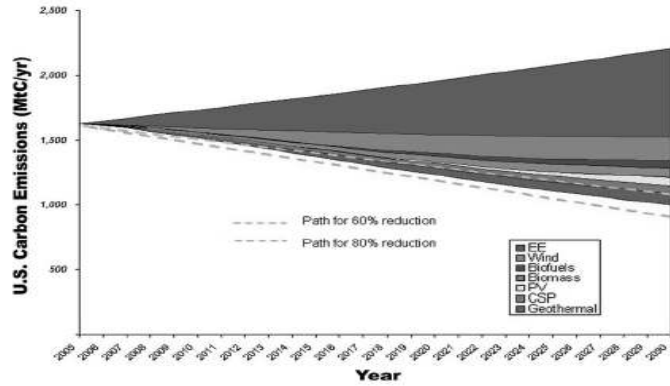


Figure 26. Potential carbon reductions in 2030 from energy efficiency and renewable technologies and paths to achieve reductions of 60% and 80% below today's emissions value by 2050.

Source: ASES, Tackling Climate Change