

Greenhouse Gas Accounting at the World Bank



WORLD BANK GROUP
Climate Change

Anne Schopp, Env Economist - GCCSO

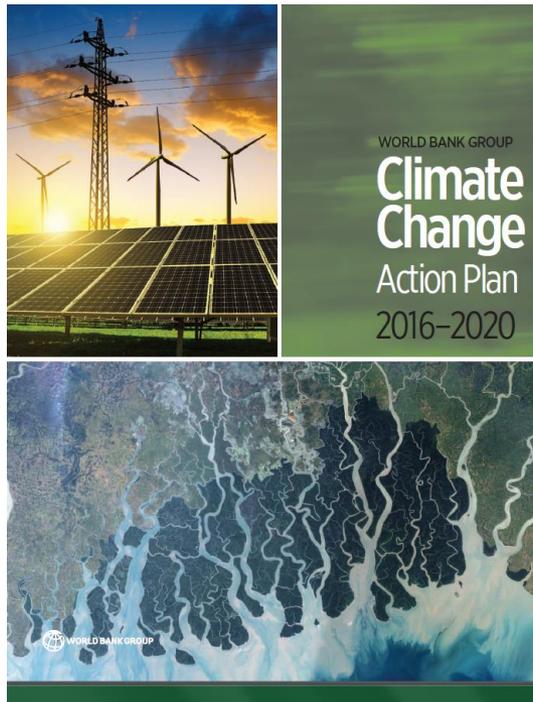
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Outline

1. Climate Change Action Plan 2016-2020
2. Climate Change Corporate Commitments
3. Project applicability
4. Gross and Net Emissions
5. Shadow Price of Carbon
6. MDB Harmonization

Climate Change Action Plan 2016-2020

- An **overarching guidance document** on WBG climate change actions
- Launched in April 2016, first update to the Board in April 2017
- Four thematic priorities



Climate Change Corporate Commitments




Climate and Disaster
Risk Screening



GHG Accounting



Shadow Price
of Carbon



Climate
Co-Benefits

Purpose	Identify climate and disaster risks	Determine project's GHG emissions	Value GHG emissions in project economic analyses	Identify climate mitigation and/or adaptation co-benefits
Benefit for Task Teams & Clients	"Climate proof" projects and better account for future conditions	Gain knowledge of emissions sources and opportunities to design lower carbon projects	Gain knowledge of the costs and benefits of carbon emissions/reductions of a project and its alternatives	Get "credit" for contributing to WBG 28% climate finance target
Applicable Projects	Required for IBRD/IDA lending operations	Required for IBRD/IDA investment lending in significant sectors	Required for projects subject to GHG accounting	Required for all IBRD/IDA lending operations

Project applicability

- GHG accounting is conducted for **investment projects** in the following sub-sectors:

Sector	Sub-sectors
ENERGY	Transmission and distribution, power generation (fossil fuel, solar, wind, geothermal, hydro), energy efficiency, energy access, pumped-storage hydro
ENVIRONMENT	Afforestation/ reforestation, sustainable forest management / fire control
AGRICULTURE	Land use change, crop production, grassland, livestock, land degradation, wetlands, fertilizers, irrigated crops, agribusiness value chain, fisheries and aquaculture
TRANSPORT	Roads, rail, waterways and urban transport
WATER and WASTE	Water treatment plants, wastewater treatment plants, desalination plants, wastewater reuse, solid waste, multipurpose water reservoirs, and irrigated rice

Gross and Net emissions

1. Gross Emissions

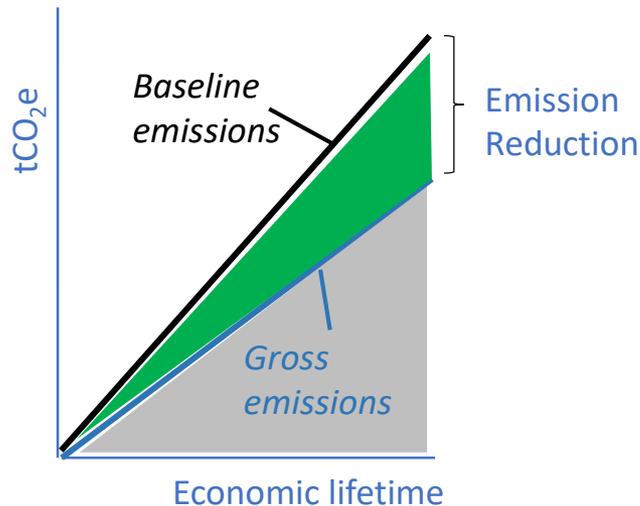
Absolute GHG emissions that a project is expected to produce.

2. Net Emissions

GHG emissions relative to a baseline (i.e., the difference between gross emissions and baseline emissions). This can consist of projects that reduce emissions (2a) or that increase emissions (2b).

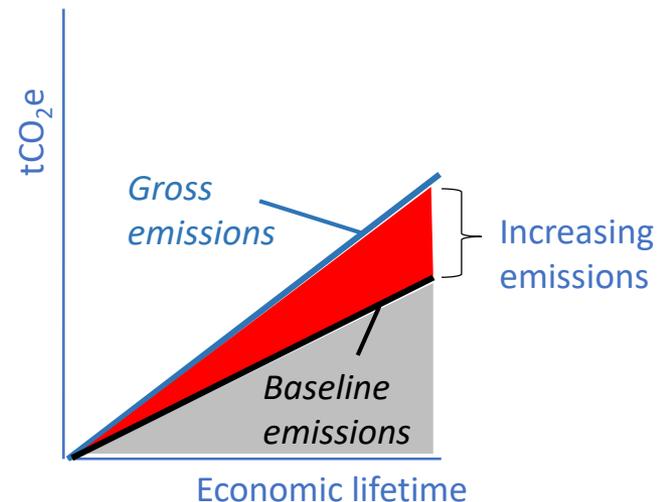
2a. Emission Reductions

Projects reducing emissions relative to a baseline



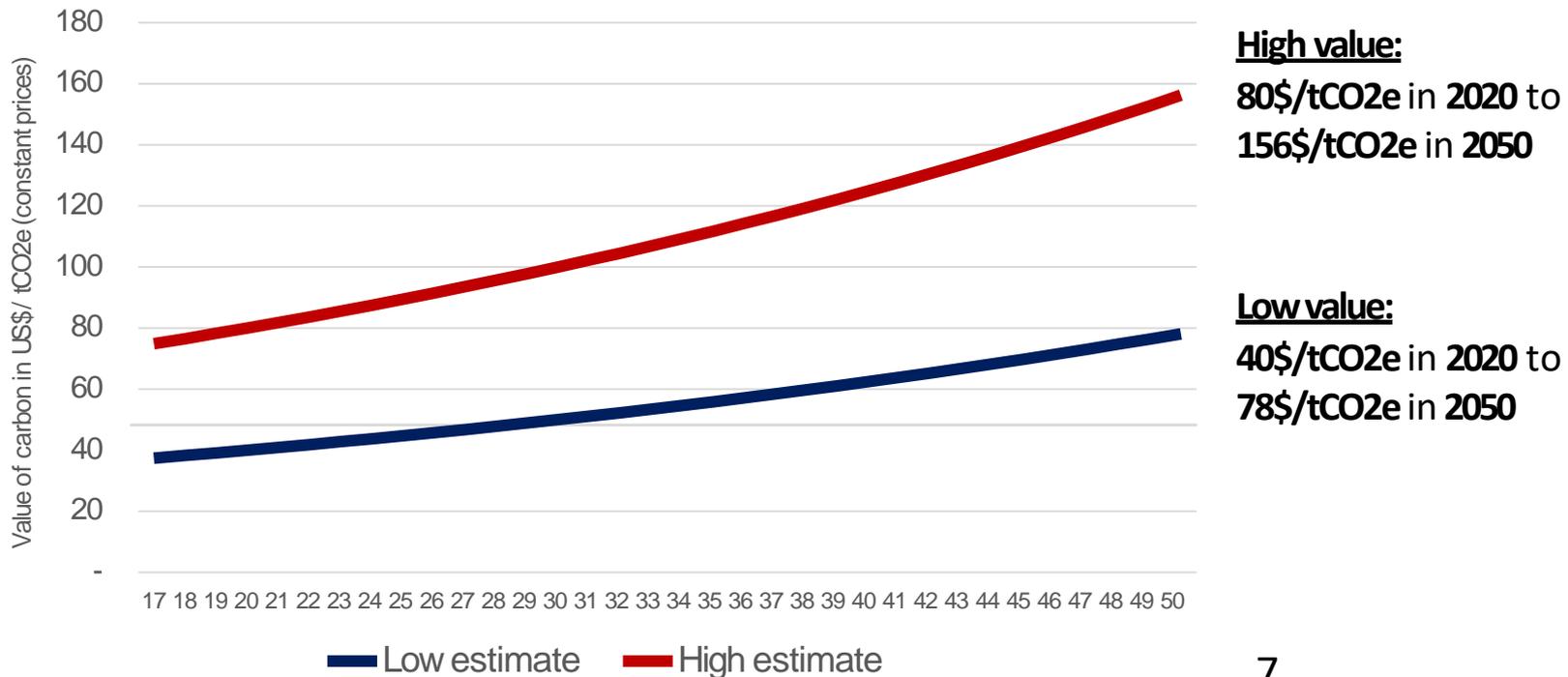
2b. Increasing Emissions

Projects increasing emissions relative to a baseline



Shadow price of carbon

- WB updated guidance note recommends that the project's economic analysis includes a low and a high shadow price of carbon (SPC)
- SPCs are consistent with report of the High-Level Commission on Carbon Prices, led by Joseph Stiglitz and Nicholas Stern, and with the core objective of the Paris Agreement of keeping temperature rise below 2 degrees



MDBs Harmonization

- The World Bank is part of
 - [IFI technical working group on GHG accounting](#) (formed in 2007/2008) and
 - [MDB technical working group on internal carbon pricing](#) (formed in 2017/2018)
- The World Bank GHG accounting methodologies are aligned with the [Harmonized Framework for GHG accounting](#) (2012) developed by technical working group of multiple IFIs
- Sector-specific GHG accounting approaches were developed for [energy efficiency, renewable energy and transport projects](#) (2015)
- Harmonization of internal carbon pricing methodologies is in early stages – a first stock taking meeting took place in early 2018
- The technical working groups [meet and exchange regularly](#) to continue collaboration on harmonizing GHG accounting and internal carbon pricing.

Thank you