DEEP DIVE III: FOREST-SMART MINING: NATURE-BASED SOLUTIONS OPPORTUNITIES FOR THE MINING SECTOR



JOHN DREXHAGE

Climate Advisor World Bank Group



ELLYSAR BAROUDY

Lead Natural Resource Management Specialist **World Bank Group**



FATOUMATA BINTA KEITA MODERATOR

Operations Officer & Country Lead International Finance Corporation (IFC)



THOMAS MADDOX

Global Director, Forests and Land **CDP**





PIPPA HOWARD

Director, Corporate Sustainability **Fauna & Flora International**



IAN HUDSON

Head of Nature-Based Solutions and Ecosystems Anglo American



ELREE WINNETT SEELIG

Head of Environmental, Social and Governance for Markets and Securities Services **Citi**



WORLD BANK GROUP

Climate-Smart Mining

FOREST-SMART MINING:

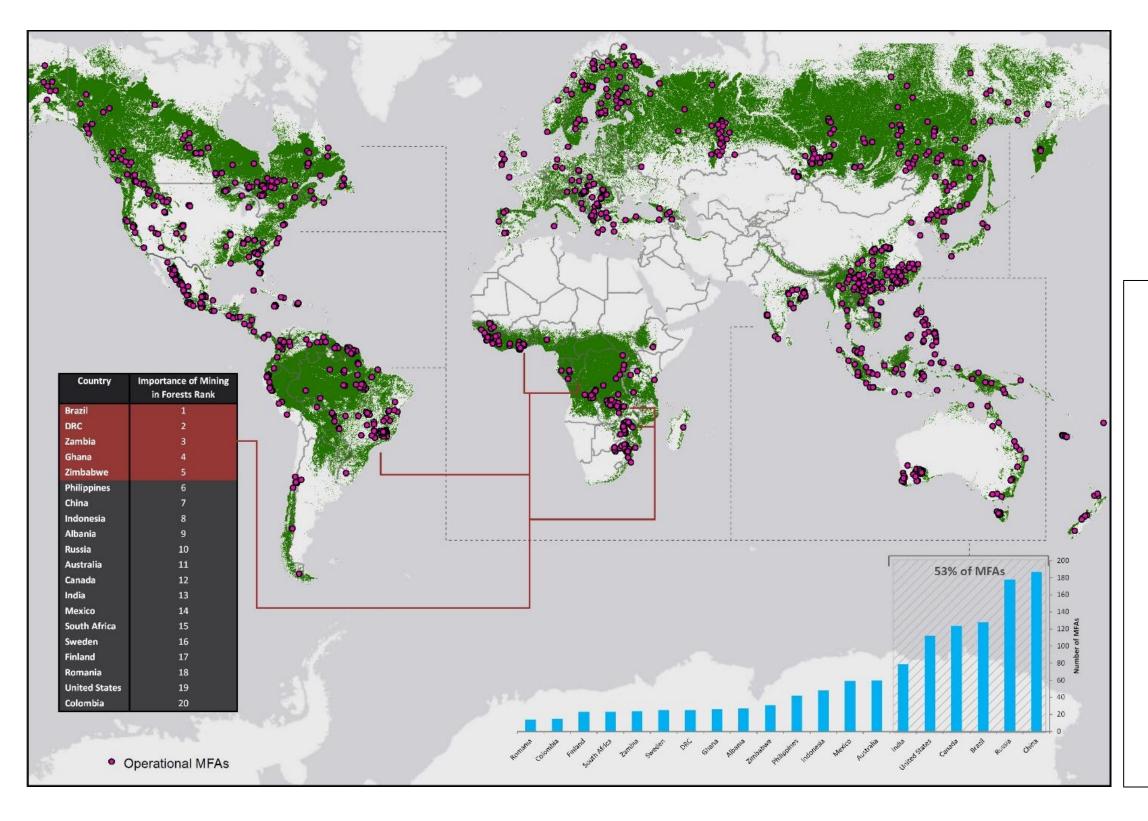
Nature-Based Solutions Opportunities for the Mining Sector

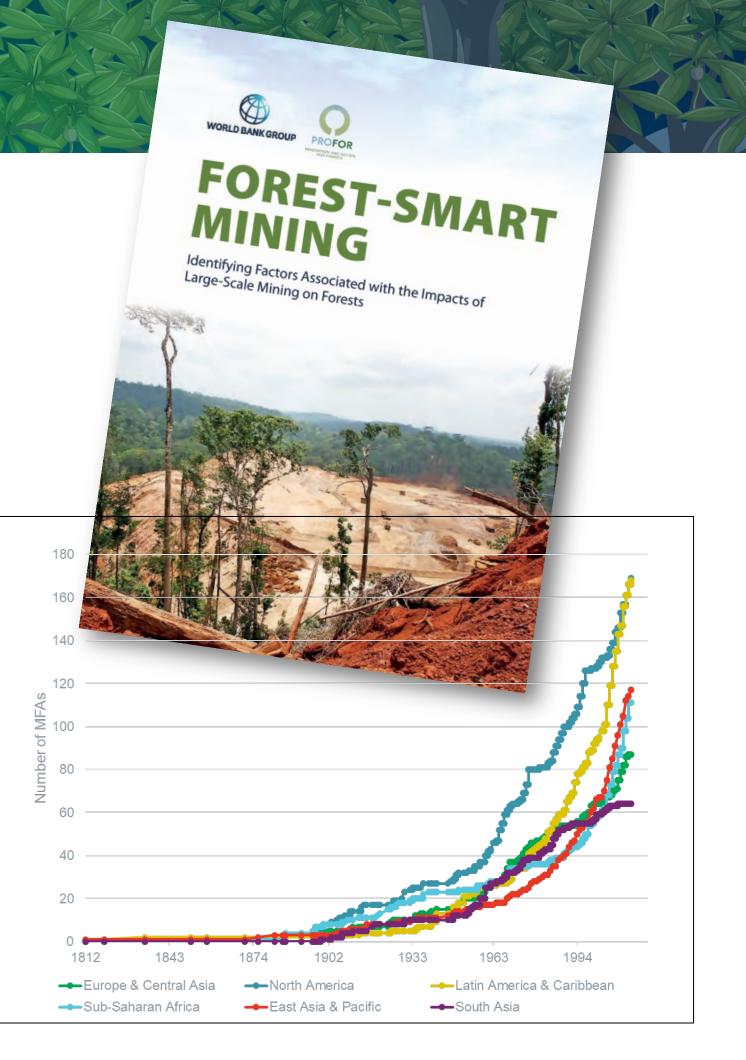
May 12th, 09:40 a.m. - 10:35 a.m. EST

Pippa Howard, Director Corporate Sustainability, Fauna & Flora International



Context: Mining in forests











FOREST SMART MINING PHASE II

Objective:

- with mine operation

To identify and plan the development and application of relevant net emissions and operational impact mitigation tools which would promote and finance Forest-Smart NBS activities by large-scale mining'.

Engagement with mining sector and companies:

Current interest lies in practical application of NbS and how can NbS help in delivering impact mitigation (biodiversity, water, social, etc)

Revised scope of work to respond to identified needs and interests: start

Fauna & Flora International (FFI) and Vivid Economics



Climate-Smart Mining



FOREST SMART MINING: PHASE II

- 1.
- 2.
- 3.
- 4.
- ٠

• Guidelines to incorporate NbS into mining projects

What are NbS and why are we talking about them now?

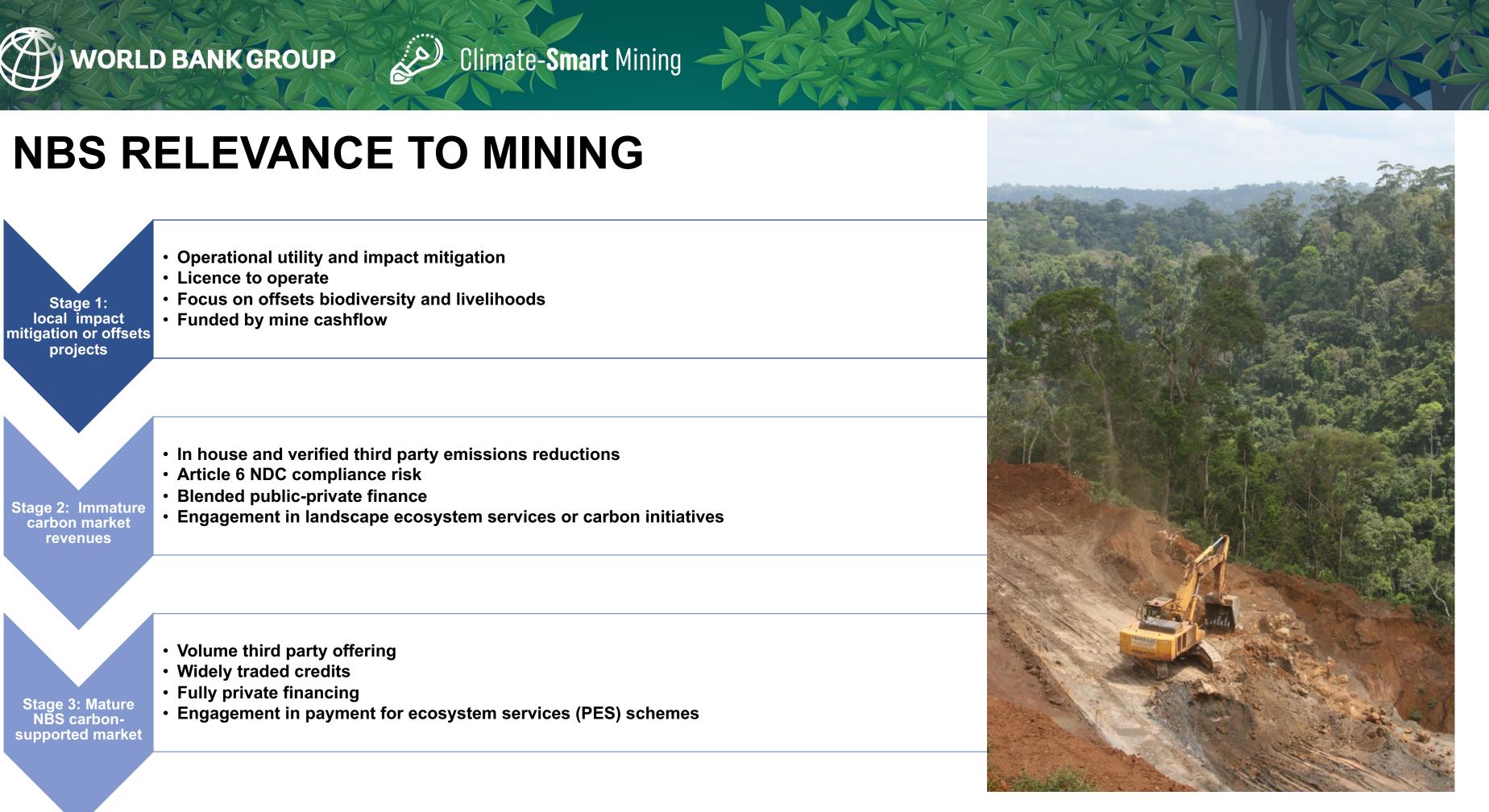
Why NbS is relevant to mining projects?

How to design an NbS according to NbS Principles?

Identifying the **business case and financing** options for NbS activities

• Pilot studies take the project sites through the four main steps in the guidelines.

Technical Advisory Committee of experts in finance, mining and climate





Climate-Smart Mining

NBS IMPLEMENTATION

Mine operation:

- NbS activities contribute to known mining challenges and fulfilment of licensing requirements
- E.g. green infrastructure to manage pollution
- e.g. habitat restoration to meet reclamation commitments.
- e.g. biodiversity offsets to achieve no net loss commitments

Managing externalities:

- NbS activities employed to mitigate mine impacts but not mandated by the terms of the license
- e.g. nature based projects to voluntarily reduce carbon emissions, address deforestation, maintain water supply, implement green engineering, manage social impacts, or other non-mandatory activities

Going beyond

- NbS activities that are additional to normal mining operations
- e.g. integrated watershed management to deliver multiple benefits in the operating landscape (biodiversity, water, carbon, social etc.)
- Payment for ecosystem services (watershed management)
- REDD+ projects and contributing to NDC or Paris Agreement





NBS FINANCE

- Carbon and nature 'targets' require at least five-fold increase in NBS investment rate over next ten years, the majority private finance, likely through increasingly large-scale projects
- Mining is currently a minnow in biodiversity finance: around US\$1 billion, 1% of the global flow
- Globally, private sector contributes about 15% to NBS finance today, but will likely have to become the dominant source
- Biodiversity finance in mining sector currently comes from mining project cash flow, but ۲ in the future could (if sufficient scale) attract project finance
- Innovations in funding and financing are driving new markets in NBS •
 - Financing mechanisms
 - Funding options
 - **Blended financing**
 - **Conservation financing**
 - Climate financing
- Mining sector NbS activities will expand especially with the uptake of nature positive objectives and the Task Force for Nature-based Financial Disclosures



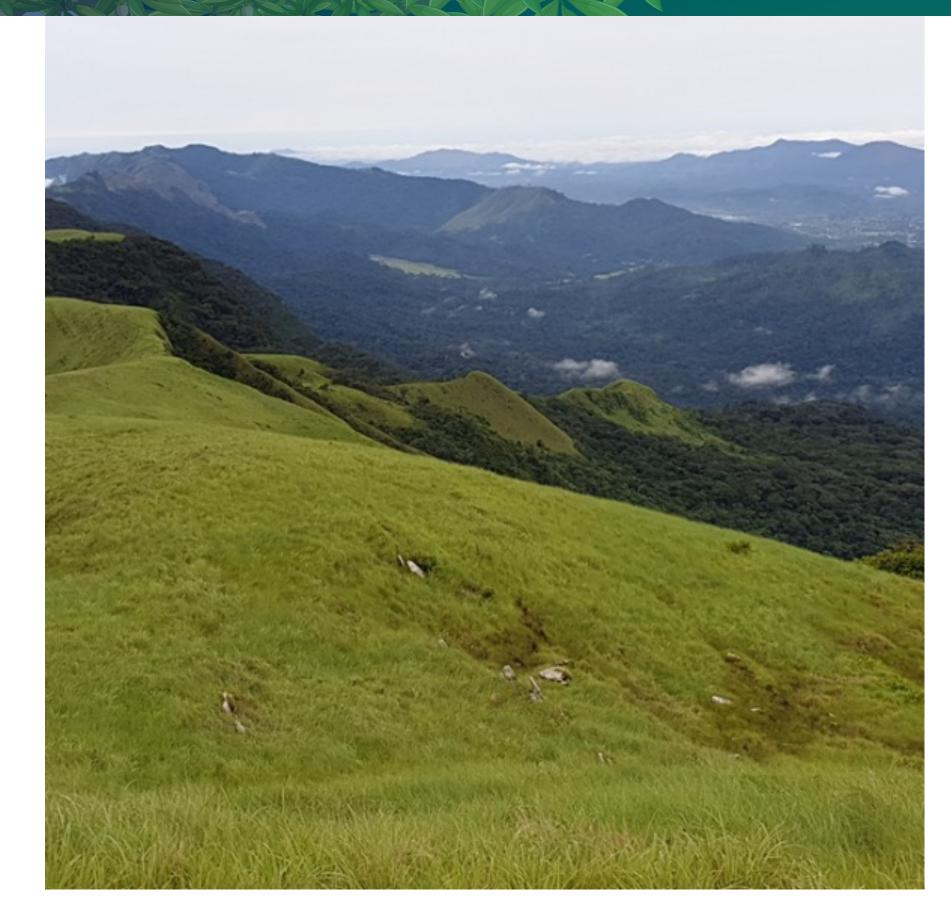




WORLD BANK GROUP



Climate-Smart Mining



GOVERNMENT RECOMMENDATIONS

- Enabling policies for nature-based solutions •
 - Recognise NbS

•

•

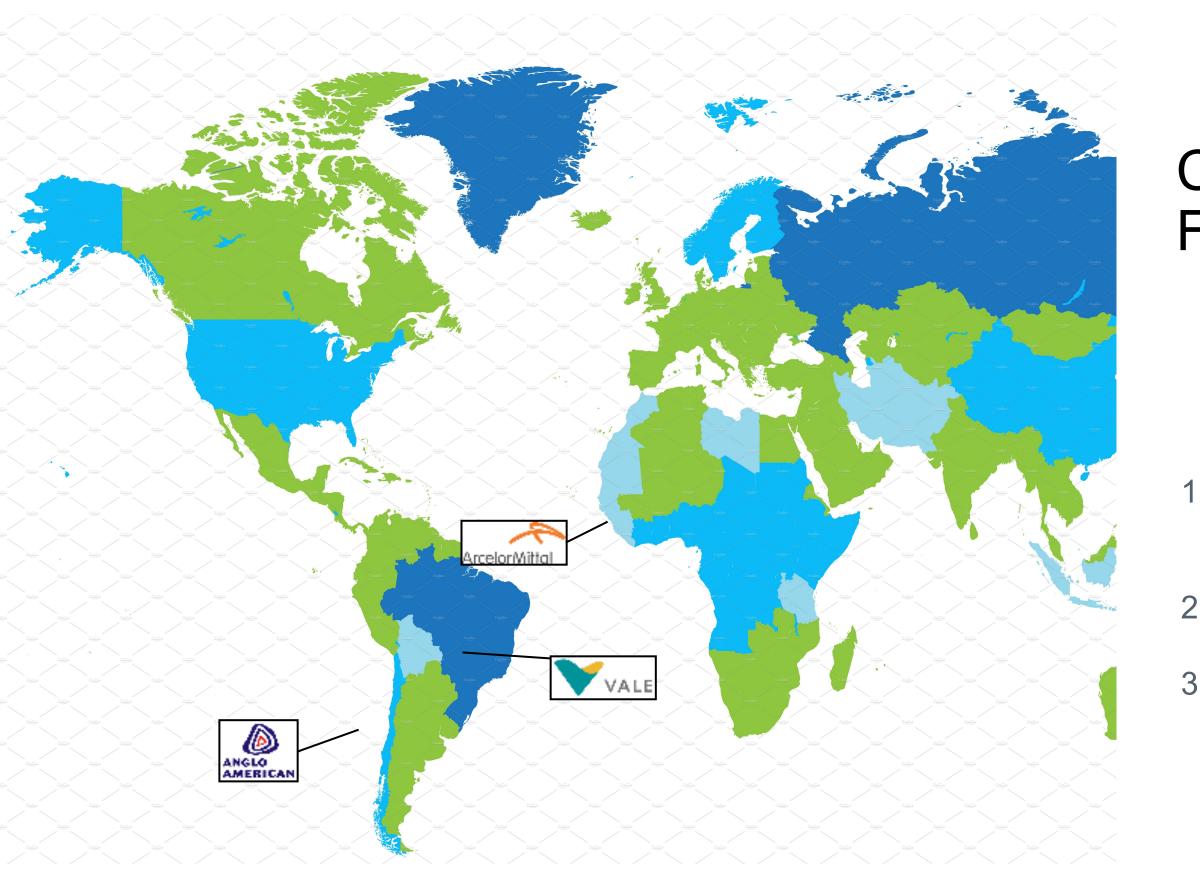
•

- Integrate into expectations within ESIA and objectives led frameworks (NPI/NG/NNL)
- Climate adaptation and mitigation strategies to include NbS as part of responses to climate change
- Integrate into water and food security ullet
- Integrate into Land degradation Neutrality strategies etc.

- Financing options and opportunities
- Applications
- Land-tenure and natural resource use



Climate-Smart Mining





Case Studies to pilot the FSM NbS approach

- 1. Anglo American Los Bronces, Chile
- 2. Arcelor Mittal AML Liberia
- 3. Vale Carajás, Brazil



WORLD BANK GROUP

Climate-Smart Mining

FOREST-SMART MINING:

Nature-Based Solutions Opportunities for the Mining Sector

May 12th, 09:40 a.m. - 10:35 a.m. EST

THANK YOU Pippa Howard, Director Corporate Sustainability, Fauna & Flora International