

Global scenario and other science issues and opportunities for climate-related finance, investment, and transition risk assessment

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Washington DC - 3 December, 2018 - Multilateral Development Banks (MDBs) today announced a joint framework for aligning their activities with the goals of the Paris Agreement, reinforcing their commitment to combat climate change.

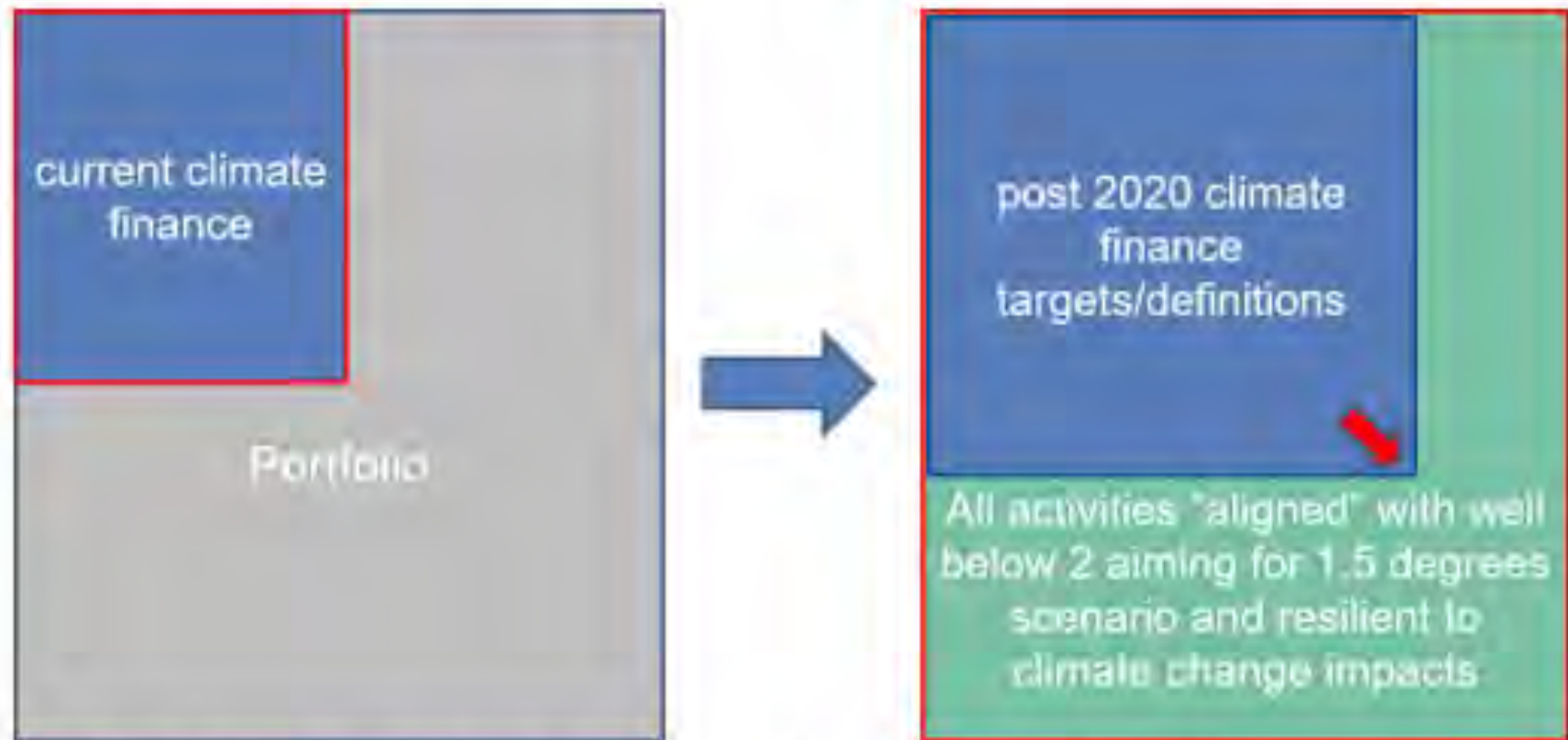
The MDBs plan to break their joint approach down into practical work on six core Paris Alignment areas - the building blocks - including: aligning their operations against mitigation and climate-resilience goals; ramping up climate finance; capacity building support for countries and other clients; plus an emphasis on climate reporting.



Need #1 - Tracking progress on mitigation.
Are we “aligned with Paris”?

A double challenge: prioritization of climate action, and alignment of the rest of the portfolio

Figure 1 – The joint MDBs' Paris Alignment approach: going beyond climate finance targets.



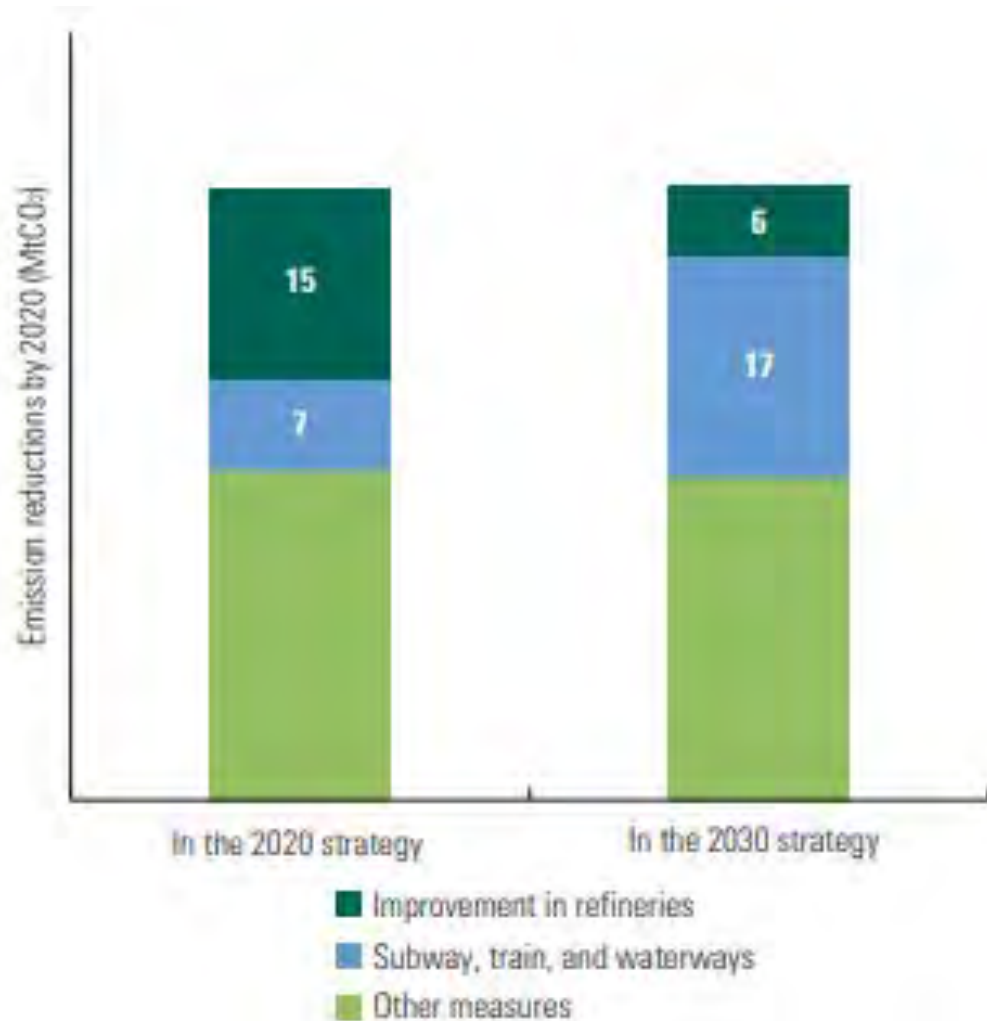
Source: EIB, presentation of the joint MDBs' Paris Alignment approach at the COP24

On the alignment of the full portfolio, no easy solution

Table 2 – WRI typology of activities' alignment with Paris temperature goal (Energy& Transport)

	PARIS-ALIGNED	CONDITIONAL	MISALIGNED
	Fully aligned with Paris Agreement consistently across all scenarios	Only aligned under certain conditions	Consistently Paris misaligned in all scenarios
Energy supply infrastructure	<ul style="list-style-type: none"> Renewable energy (solar, wind, small hydro, tidal, wave and ocean) Electricity system flexibility option 	<ul style="list-style-type: none"> Energy transmission and distribution infrastructure Geothermal² Gas (power plants, transport of gas)¹ Large hydropower³ Biomass, incl. bio energy carbon capture storage^{3,4} Coal with carbon capture and storage^{1,3} Nuclear³ 	<ul style="list-style-type: none"> Coal-fired power plants with unabated emissions over their lifetime New upstream oil and gas production and exploration Coal mining Oil power plants
Transport infrastructure	<ul style="list-style-type: none"> Zero-carbon transport fueling infrastructure (electricity, hydrogen, alternative fuels) Non-motorized transport infrastructure (sidewalks and dedicated bike-lanes, bike-sharing infrastructure) Integration of transport and urban development planning Electric rail and rolling stock (passenger and freight) Electric public transport Inland waterways Transport and travel demand management measures 	<ul style="list-style-type: none"> Road infrastructure, including tunnels and bridges Diesel rail and rolling stock Port expansion for transport of non-fossil fuel freight 	<ul style="list-style-type: none"> New road, rail, waterway, and port infrastructure for fossil fuel transport New airports/airport expansion⁵

What is consistent with Paris depend on a long-term vision



From long-term target to short-term policies

Does the net zero objectives make it possible to decouple countries? And work at the country level?

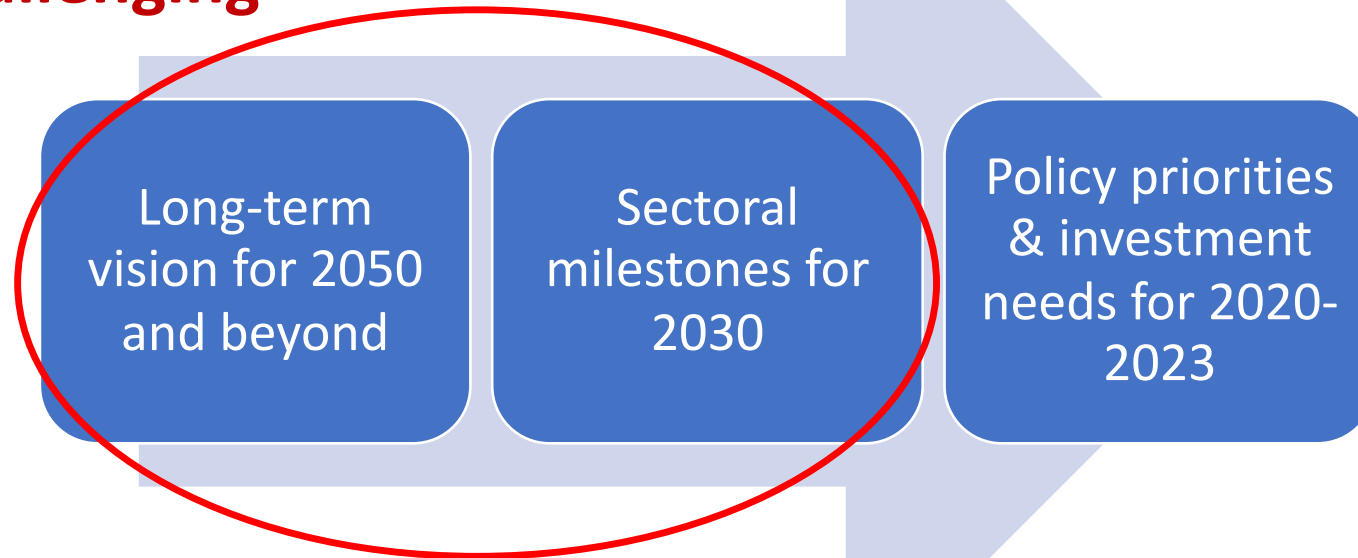
Long-term
vision for 2050
and beyond

Sectoral
milestones for
2030

Policy priorities
& investment
needs for 2020-
2023

From long-term target to short-term policies

IAM-like models the main tool to mobilize, but challenging



Technical issues (e.g., technological uncertainty), but also political issues (i.e., how to create ownership?)

Also, 2030 is sort of the maximum of the range of possible pathways.

PLAN DE DESCARBONIZACIÓN

COMPROMISO DEL GOBIERNO DEL BICENTENARIO

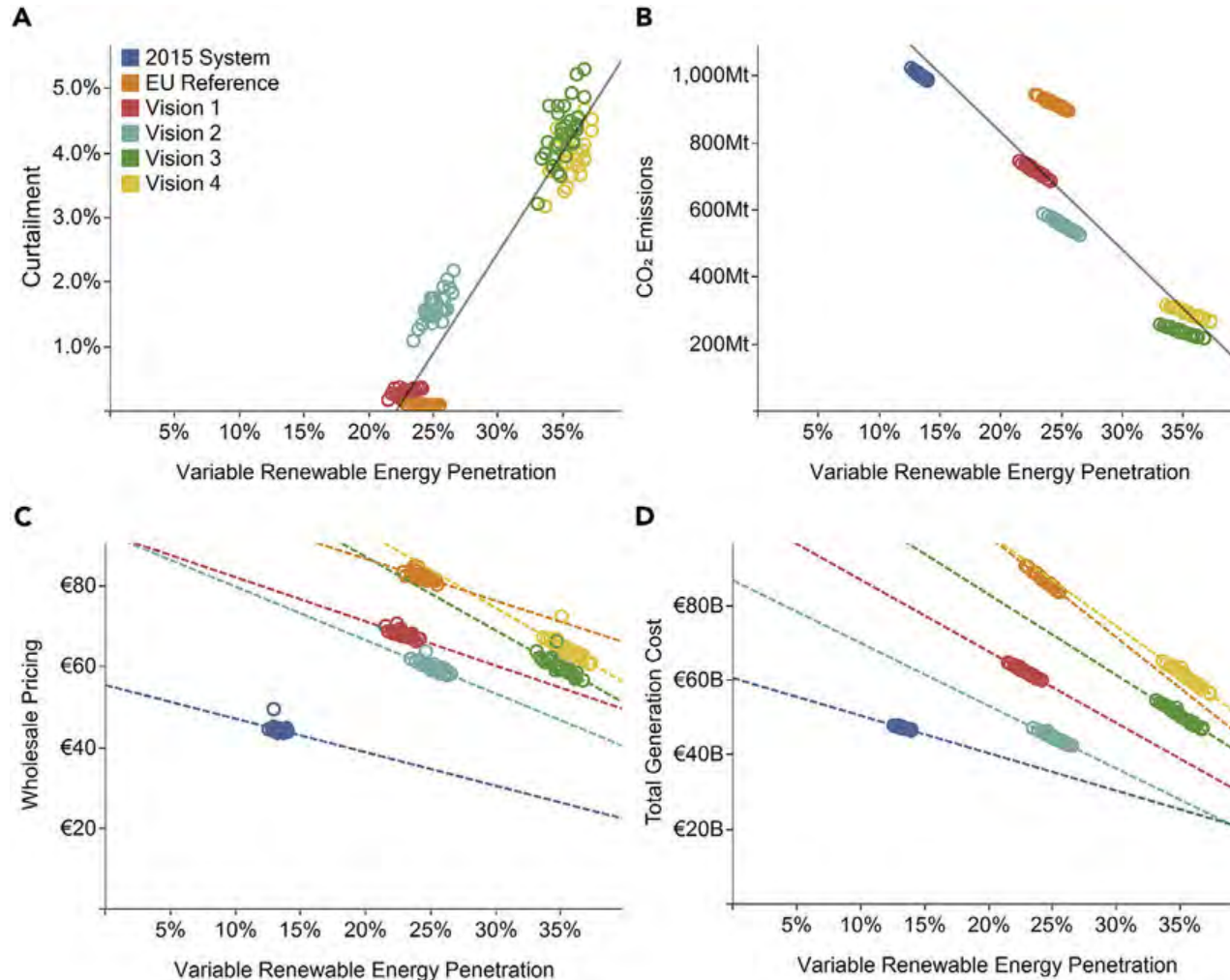


COSTA RICA
GOBIERNO DEL BICENTENARIO
2018 - 2022



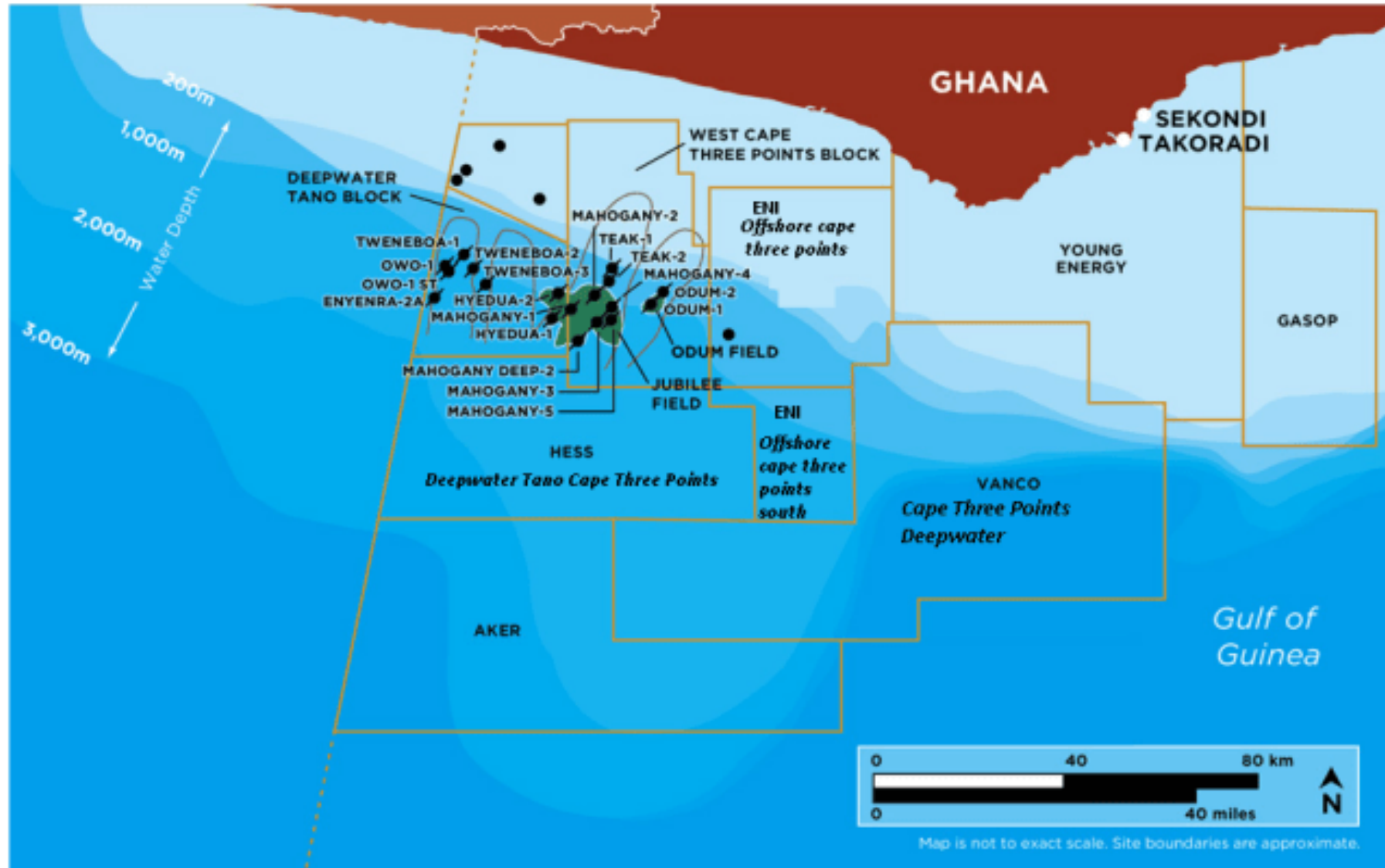
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COSTA RICA
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~~Is gas a transition fuel?~~ Where and when is gas a transition fuel?

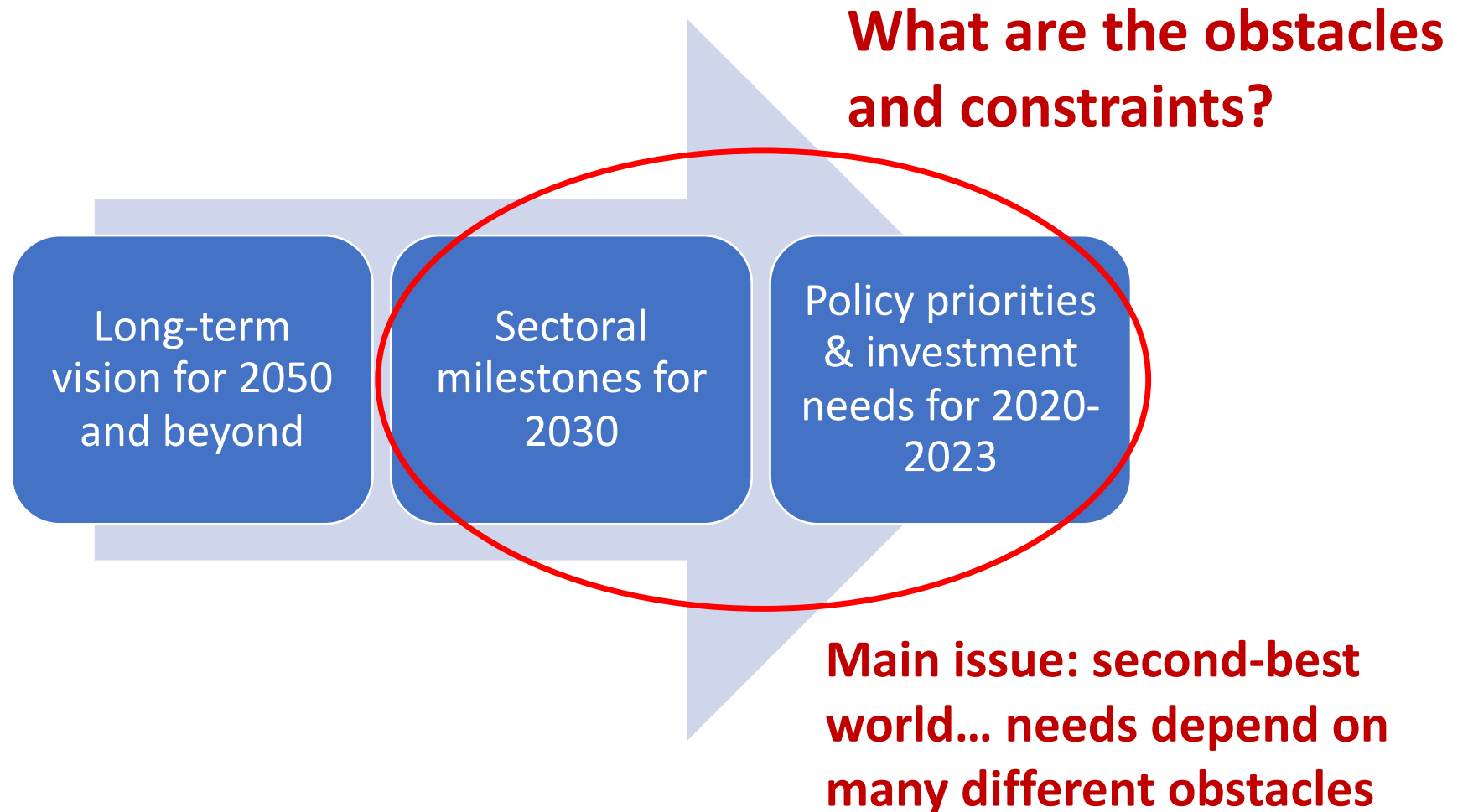


- More gas generation useful and profitable in some contexts (e.g., low existing base production) and under some assumptions on the future (e.g., on battery costs and demand management).
- Can we identify simple rules-of-thumb for which gas generation project helps (vs. threaten) RE penetration?
- DMDU approaches could be mobilized

What can we say to low-income countries with fossil fuel reserves? Is there a rationale for non-exploitation?



From long-term target to short-term policies



A mission oriented approach to decarbonization – and a focus on obstacles

Decarbonization of the power sector
Efficiency and electrification of transport
Efficiency and electrification of buildings and cities
Efficiency and electrification of industries
Forestry

A mission oriented approach to decarbonization – and a focus on obstacles

	Incentive	
	National	Global
Decarbonization of the power sector	+++	+
Efficiency and electrification of transport		
Efficiency and electrification of buildings and cities		
Efficiency and electrification of industries	+++	+
Forestry		

A mission oriented approach to decarbonization – and a focus on obstacles

	Incentive		Knowledge, capacity, institutions	
	National	Global	National	Global
Decarbonization of the power sector	+++	+	+	
Efficiency and electrification of transport			+++	
Efficiency and electrification of buildings and cities			+++	+
Efficiency and electrification of industries	+++	+		+
Forestry			++	

A mission oriented approach to decarbonization – and a focus on obstacles

	Incentive		Knowledge, capacity, institutions		Behaviors	
	National	Global	National	Global	National	Global
Decarbonization of the power sector	+++	+	+			
Efficiency and electrification of transport			+++		+++	
Efficiency and electrification of buildings and cities			+++	+	+++	
Efficiency and electrification of industries	+++	+		+		
Forestry			++			

A mission oriented approach to decarbonization – and a focus on obstacles

	Incentive		Knowledge, capacity, institutions		Behaviors		Technologies	
	National	Global	National	Global	National	Global	National	Global
Decarbonization of the power sector	+++	+	+					++
Efficiency and electrification of transport			+++		+++			+++
Efficiency and electrification of buildings and cities			+++	+	+++			+
Efficiency and electrification of industries	+++	+		+				+++
Forestry			++					

A mission oriented approach to decarbonization – and a focus on obstacles

	Incentive		Knowledge, capacity, institutions		Policies		Technologies	
	National	Global	National	Global	National	Global	National	Global
Decarbonization of the power sector	+++	+						++
Efficiency and electrification of transport					+++			+++
Efficiency and electrification of buildings and cities			+++	+	+++			+
Efficiency and electrification of industries	+++	+		+				+++
Forestry			++					

How much concessional resources do we need to tackle those obstacles?

PLAN DE DESCARBONIZACIÓN

COMPROMISO DEL GOBIERNO DEL BICENTENARIO



COSTA RICA
GOBIERNO DEL BICENTENARIO
2018 - 2022



DESCARBONICEMOS
COSTA RICA
COMPROMISO PAÍS 2018-2050

An aerial photograph showing a village that has been severely impacted by flooding. The water is dark and murky, covering most of the ground. Several houses with corrugated metal roofs are partially submerged or completely destroyed. Debris, including wood, metal, and household items, is scattered throughout the water. Some people can be seen wading through the water or standing on small patches of land. The overall scene depicts a state of significant destruction and displacement.

Need #2 – Tracking progress in building resilience over time and reporting on physical risks

UNBREAKABLE

» Building the Resilience of the Poor in the Face of Natural Disasters

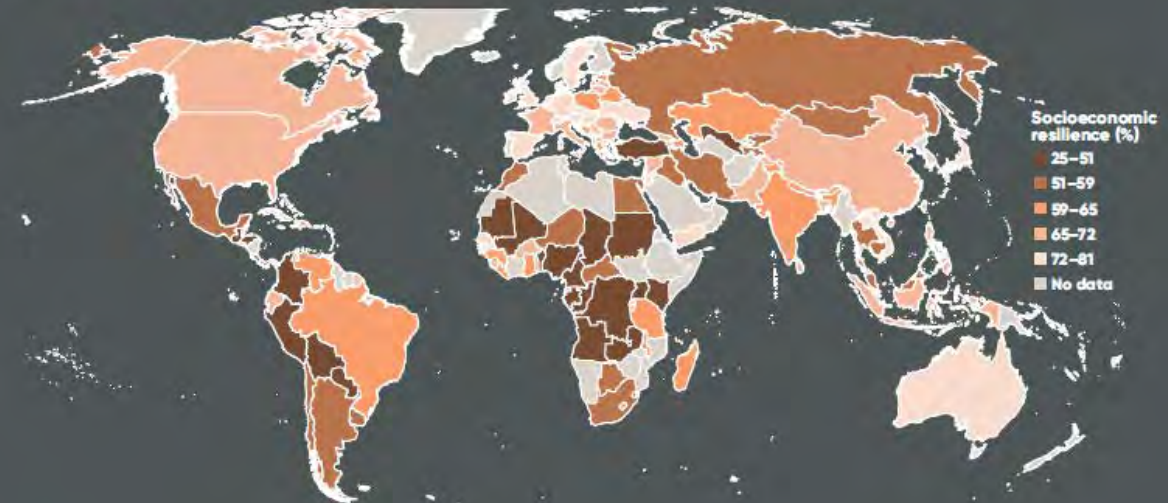
We have 149 countries covered by the national-level estimates.

Reports are published, data platform under preparation

But open questions about how to ensure regular updates and many data issues

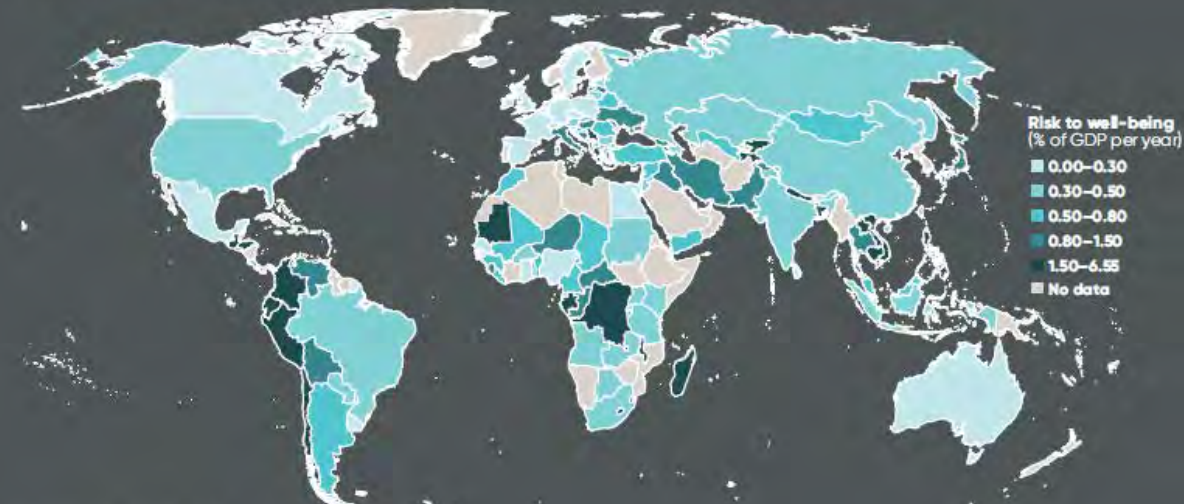
Map O.1: Socioeconomic resilience measures the ability of a population to cope with asset losses

Socioeconomic resilience (percent), 117 countries



Map O.2: Risk to well-being combines hazard, exposure, asset vulnerability, and socioeconomic resilience

Risk to well-being as percent of GDP per year, 117 countries



Sources: World Bank estimates.

How to measure progress in building resilience at the country level? A scorecard approach, to be tested on the Caribbean in FY20

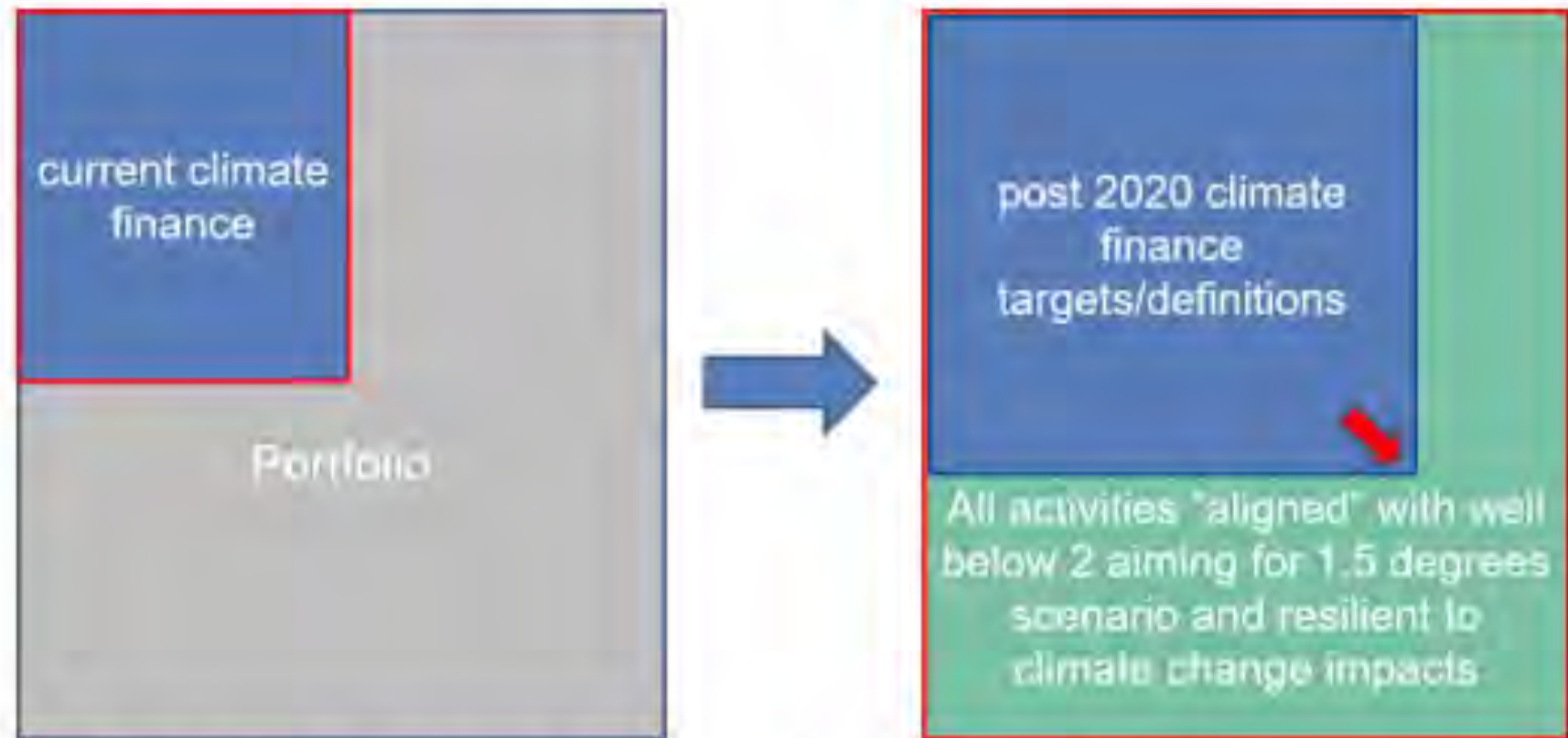


What about projects?



A double challenge: prioritization of climate action, and alignment of the rest of the portfolio

Figure 1 – The joint MDBs' Paris Alignment approach: going beyond climate finance targets.



Source: EIB, presentation of the joint MDBs' Paris Alignment approach at the COP24

First question: How resilient are our projects? Will they deliver in spite of climate change? (in financial terms: is the project well priced?)



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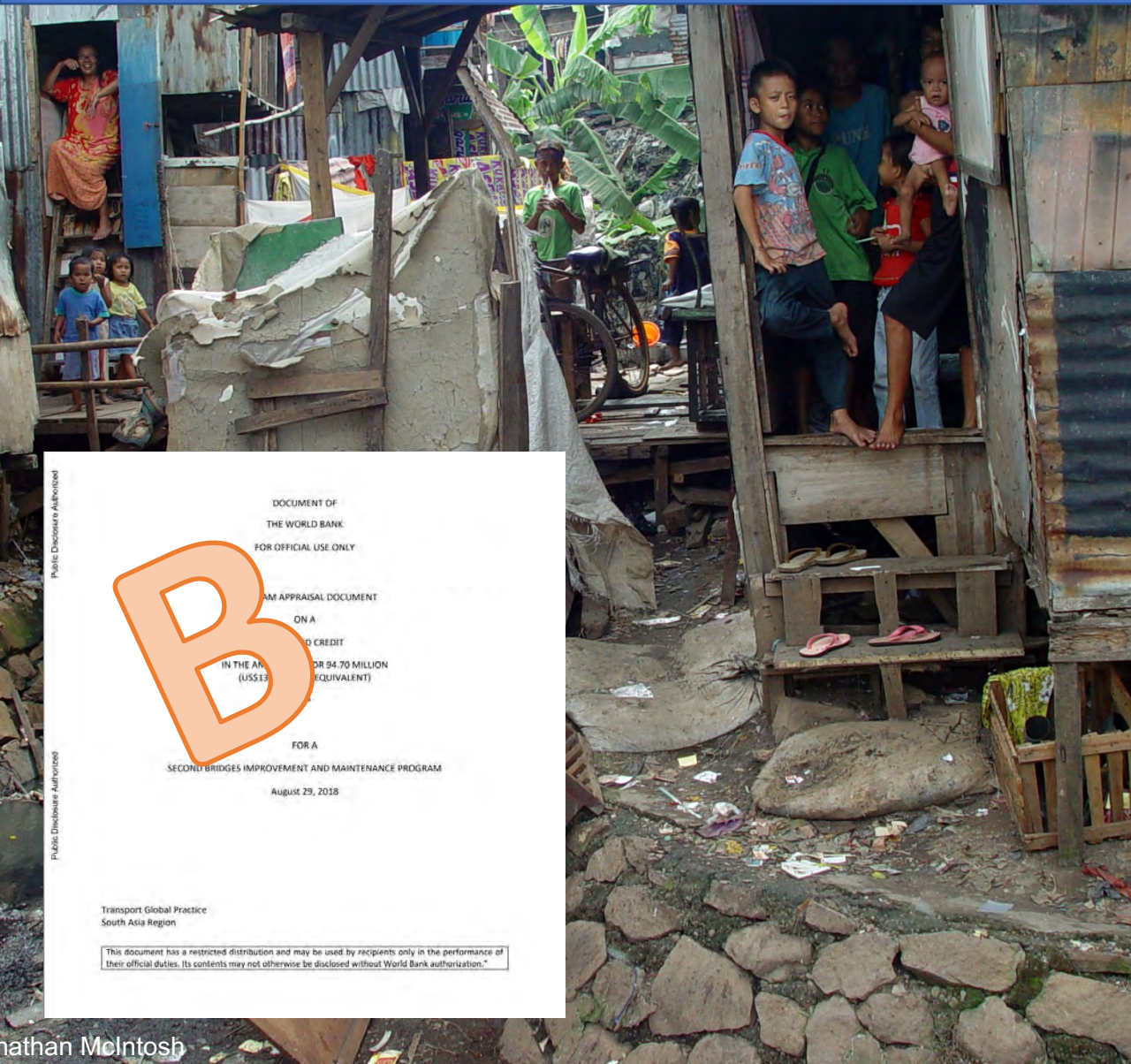
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Second question: How much do our projects contribute to people's resilience?



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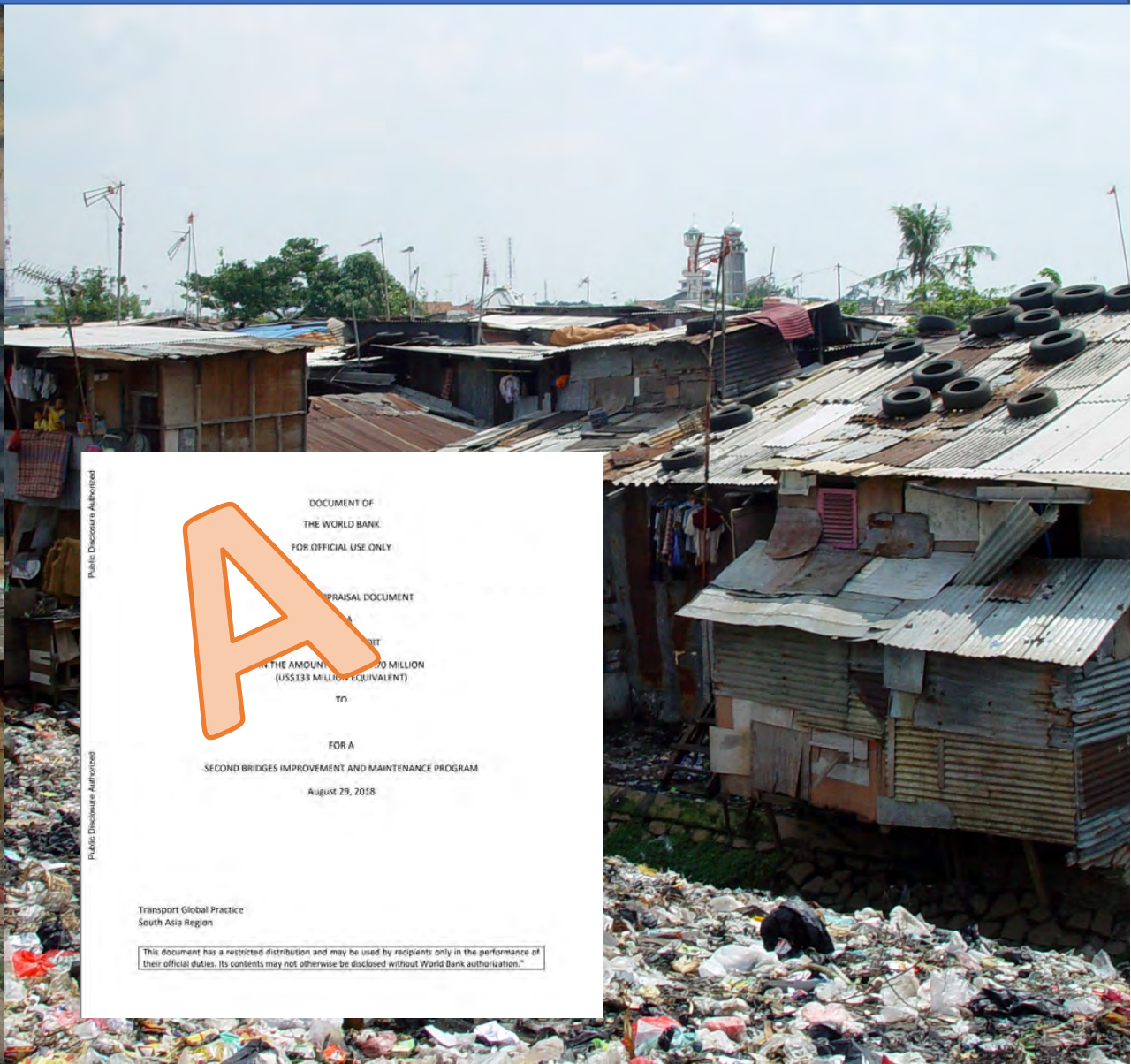
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Resilience rating

Resilience of project

C

The project reports a **qualitative** residual risk estimate.

B

The project economic or financial analysis includes a **quantitative** estimate of risk, considering the **typical investment lifetime** in the sector, **simple** risk assessment methodologies, and the **most likely** scenarios.

A

The project economic or financial analysis includes a **quantitative** estimate of risk, considering the **full asset lifetimes**, **state-of-the art methodologies**, and the **range of plausible scenarios**.

A+

The economic or financial analysis includes a **quantitative** estimate of risk, considering the **full asset lifetimes**, **state-of-the art methodologies**, the **range of plausible scenarios**, and **response measure** in case of surprises and unexpected events.

Resilience through project

C

The project **generates development or poverty-alleviation benefits**, creates jobs, diversifies or enhances livelihoods, increase incomes, or accelerate economic growth.

B

The project explicitly aims at **building the resilience of the beneficiaries** (e.g., through access to basic services or financial instruments) and does not create (or incentivize investments that create) new risks or climate vulnerabilities.

A

The project explicitly aims at **building the resilience of the beneficiaries to disaster and climate risks**, and does not create (or incentivize investments that create) new risks or climate vulnerabilities.

A+

The project builds the resilience of the beneficiaries and does it **in transformational ways**, by creating incentives, data, or capacity to reduce risks or adapt to climate change.

Identify, learn from, and reward best practices



ANNUAL REPORT 2018

Better measure and report on what we are doing

Create a global standard used in financial markets and public procurement to influence beyond our portfolio



