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ASIAN DEVELOPMENT BANK BUSINESS OPPORTUNITIES FAIR 2025

16-18 SEPTEMBER 2025 | ADB HEADQUARTERS, MANILA

QUALITY INNOVATION IMPACT

Your Edge in Bidding and Tendering: Understanding ADB's Sustainable Procurement Considerations

17 September 2025

Asian Development Bank

Sustainable public procurement

achieved through

- policy and regulation
- contract requirements
- specification
- criteria setting

informed by prioritization and
market analysis

ENVIRONMENTAL



SOCIAL



ECONOMIC



INSTITUTIONAL



It's
more than
just green

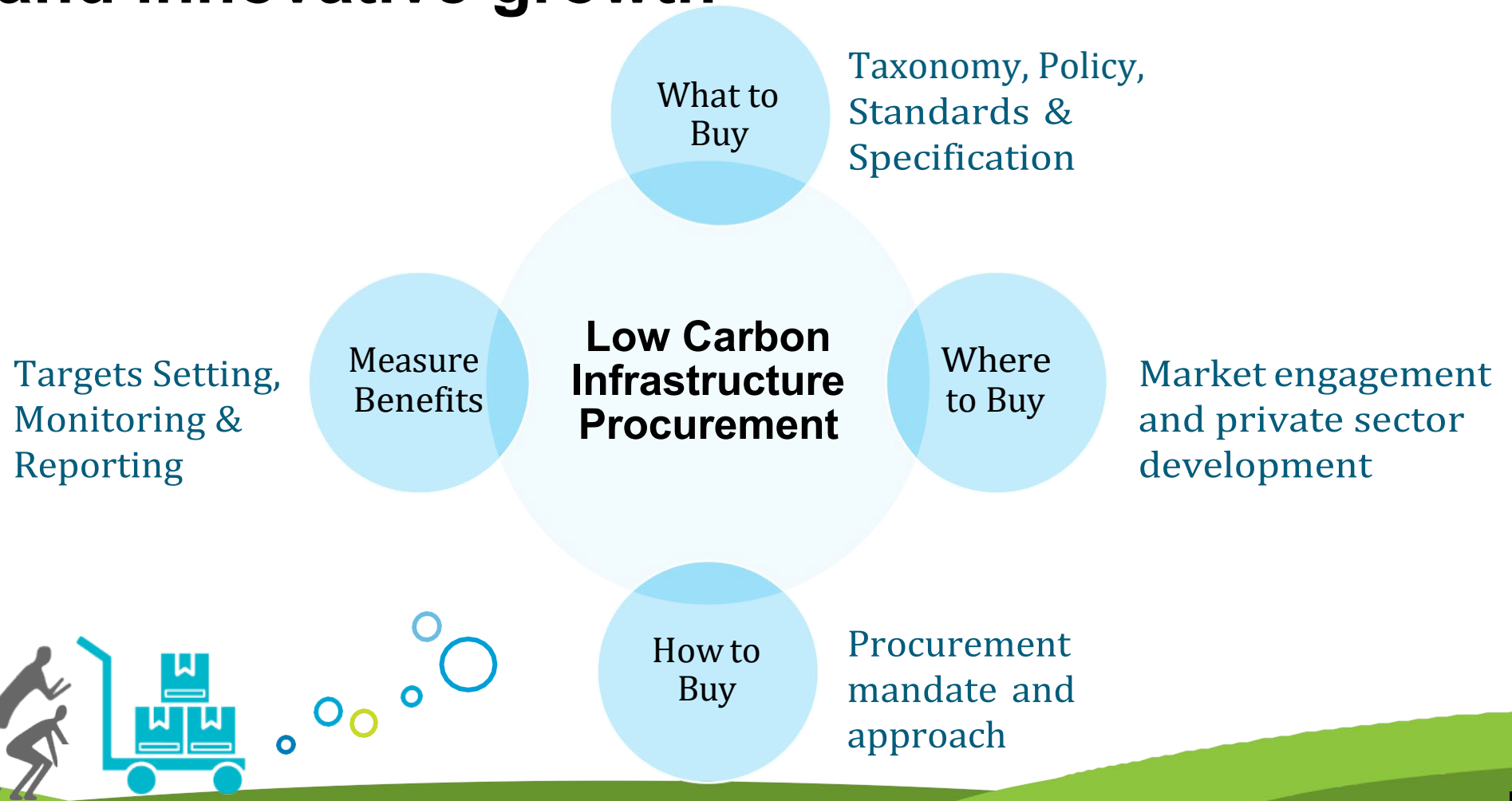


**Strategically Aligned
with Public Goods**

Amplifier of
environmental, social,
economical impacts
through market shaping

*Do good both through what is built
and through how it is built*

Bringing public and private sector together towards green, inclusive and innovative growth



Q: What're some of the focus areas you are looking into next and how should consultants, suppliers and contractors be prepared for it to max their competitive edge?



Green Construction Material Application in Mekong Delta Region

17 September 2025

Chitoshi Izumi

Senior Procurement Specialist, Asian Development Bank



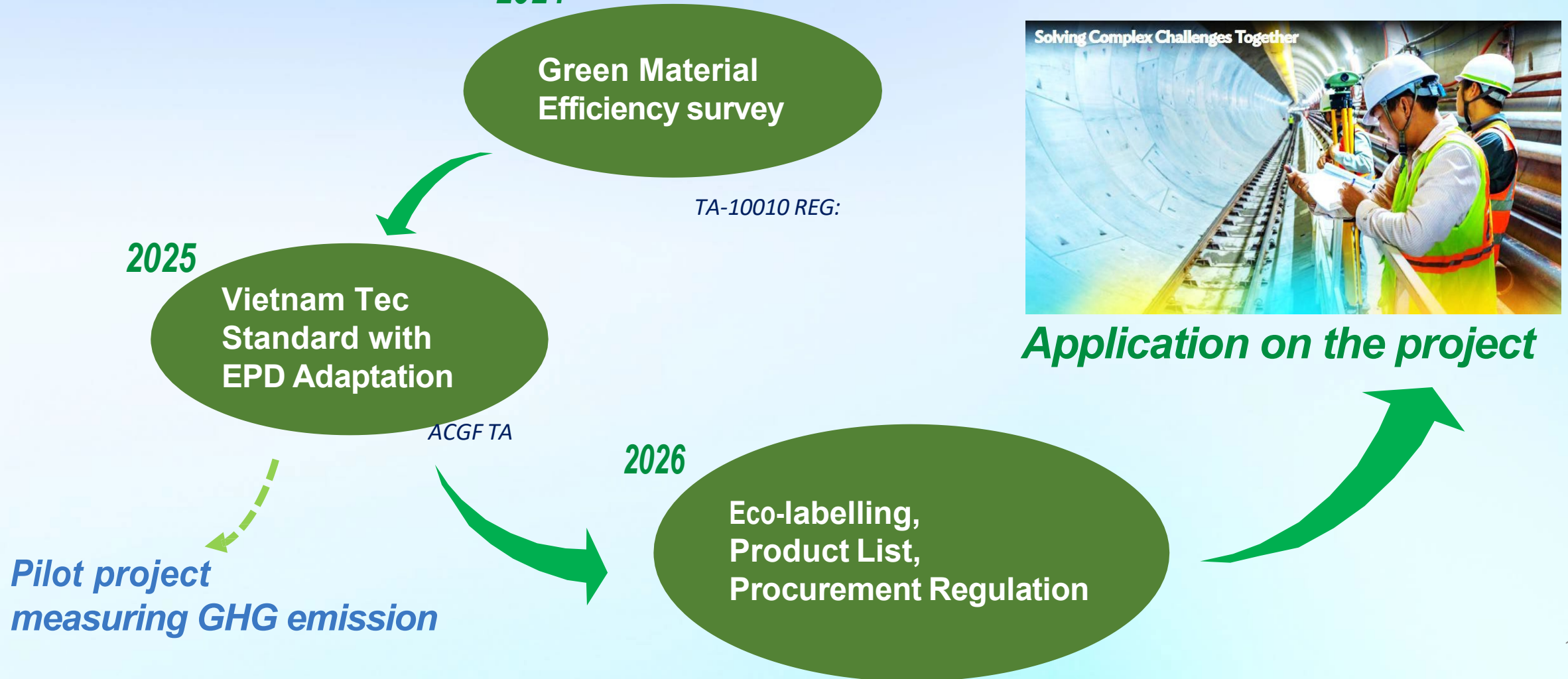
Construction Material Efficiencies

Country	Green material	Remark
 Vietnam	-Portland cement blend (PCB) -Blast furnace slag cements -Steel from scrap -Blast furnace slag concretes	-PCB is popular with low cost -The price is similar to virgin steel -One supplier under operation for PCB_{BFS}
 Cambodia	-Portland cement blend (PCB)	-PCB already has some market share -CAM market is not matured for SusPP.
 Lao PDR	-No green material available	-LAO market is not matured for SusPP. -Import of blended cement from VIE & THA are expected
 Thailand	-Various green materials -700 Eco label products	-Green material lists under MONRE -Pilot project start to apply green material from Eco-label product list





STEP to Green Material Application on projects_Vietnam 2024





It Takes A Village

Green Material
Efficiency
survey

Vietnam Tec
Standard with
EPD Adaptation

Eco-labelling,
Product List,
Procurement Regulation

Project
Implementation



Global Cement and Concrete
Association



TỔNG HỘI XÂY DỰNG VIỆT NAM
Vietnam Federation of Civil Engineering Associations



VGBC | Vietnam Green
Building Council
Hội đồng Công trình Xanh Việt Nam



switchasia



Funded by
the European Union

**SUPPLIERS/
CONTRACTOR/
CONSULTANTS/**

NGO & CSO





Low carbon cement (blended cement) in India

Dawa Choki
Procurement Specialist
PFP/PPFD



GREENPRO CERTIFICATION PROCESS

GreenPro Certification enables an
All Around Comprehensive Benchmarking of Products.

**PRODUCT
REGISTRATION**

**STEP
01**

**CREDIT
COMPLIANCE**

**STEP
02**

**SUBMISSION
TO COUNCIL**

**STEP
03**

**THIRD PARTY
VERIFICATION**

**STEP
04**

**FACTORY
SITE AUDIT**

**STEP
05**

AWARD OF GREENPRO CERTIFICATION

Producers of GreenPro certified cement





Types of cements and relevant Indian standard specifications

Sr. No.	Type of Cement	IS Code No.
1	Ordinary Portland Cement (OPC) (OPC33, 43, 43S, 53 & 53S)	IS 269:2015
2	Portland Pozzolana Cement (PPC)	IS:1489-2015 (Part-I): Fly ash
3	Portland Pozzolana Cement (PPC)	IS:1489-2015 (Part-II): Calcined Clay
4	Portland Slag Cement (PSC)	IS:455-2015
5	Composite Cement	IS:16415-2015
6	White Portland Cement	IS: 8042-2015
7	Sulphate Resisting Portland Cement	IS:12330-1988
8	Super Sulphated Cement	IS:6909-1990
9	Low Heat Portland Cement	IS:12600-1989
10	Hydrophobic Portland Cement	IS:8043-1991
11	Rapid Hardening Portland Cement	IS:8041-1990
12	Masonry Cement	IS:3466-1988
13	Oil Well Cement	IS:8229-1986
14	High Alumina Cement	IS:6452-1989



India 57230-001: Sikkim Integrated Urban Development Project

- **Project Cost: USD 226 million**
- **Implementing Agency: Urban Development Department, Govt. of Sikkim**
- **Project Components:**
 - ✓ Water Supply,
 - ✓ Sanitation,
 - ✓ Transit hubs cum community complex, and
 - ✓ Other civil infrastructures
- **Mandatory use of low carbon cement (PPC) stipulated in the Section 6 of the Bidding Document, monitored and reported through QPR**





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Climate Mitigation Finance of
~\$10.61 million

Reduction in carbon Emission
by ~15,400 tons of CO₂ eq

Estimated quantity of cement
to be procured under the
project is **56,000 tons**



ASIAN DEVELOPMENT BANK BUSINESS OPPORTUNITIES FAIR 2025

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QUALITY INNOVATION IMPACT

Embodied Carbon-monitoring Pilot in India

ANITA KUMARI

Associate Procurement Officer, INRM

PFP-PPFD



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Institutional high-rise (32 floors, 90,774 m²)

ADB Loan 4437-IND: GIFT-City Project, India

Pilot period: (September 2024 – March 2025)

Scope: Embodied carbon assessment (A1–A5)

Goal: Test methods for integrating Whole Building LCA into ADB projects

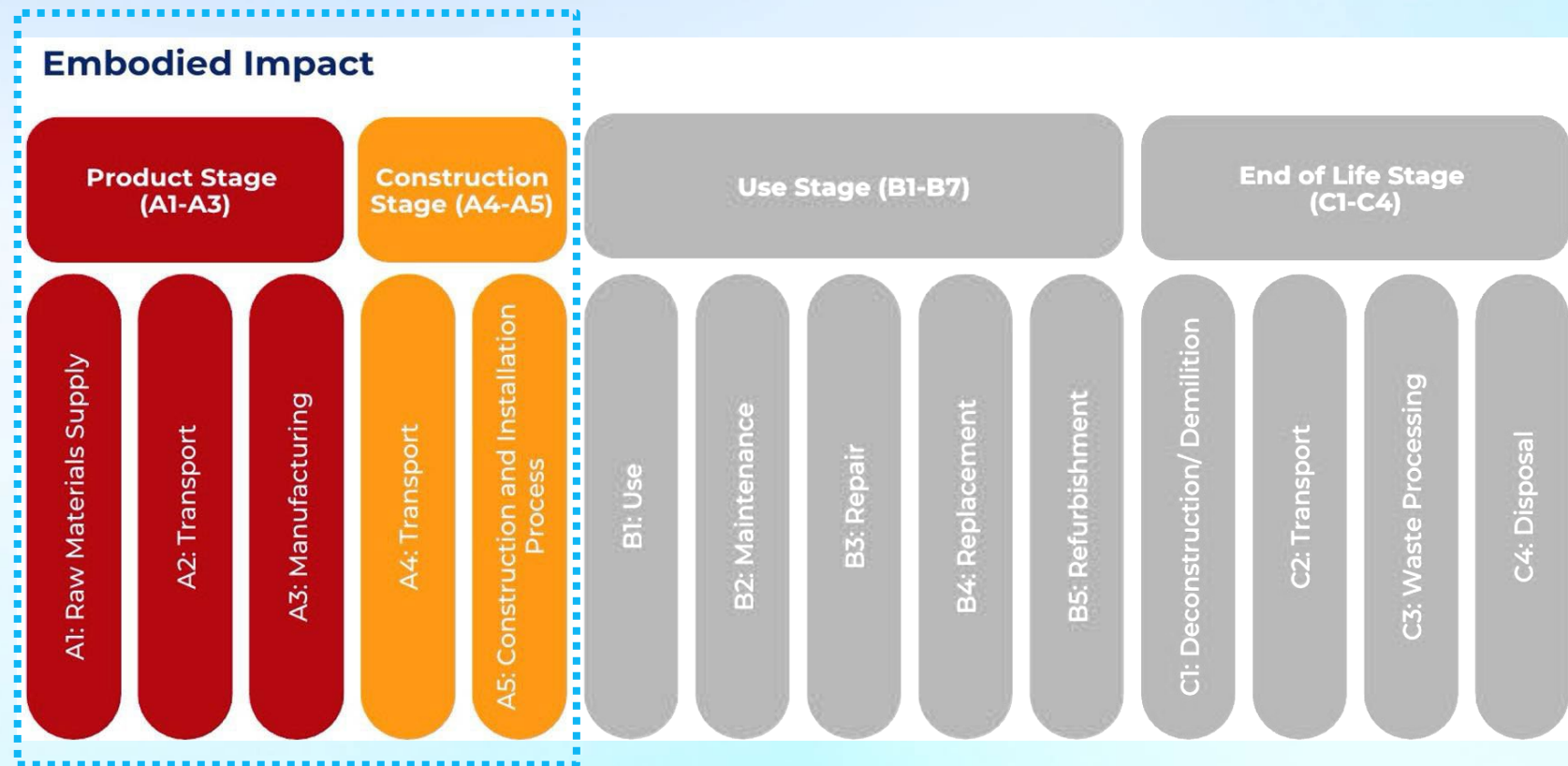


Methodology

Tools & Data Sources:

- EC3 (Embodied carbon in construction calculator) default emission factors
- Project-specific EPDs (steel, cement)
- Proxy where there is no EPD
- Actual fuel consumption data
- EF from the GLEC (Global logistic Emission council) Framework

Emission Calculation Stages



Source: ISO 21930

Framework: Whole Building LCA (100-year reference period)



Output

WBLCA Boundary =100 years	Material	Material Quantity	Production Stage			Construction Stage				Emissions	
LCA Phase	Masterformat	Various Unit	A1 - A3			A4				A5	Total A1 - A5
Carbon Type			By EC3 (tons CO2e)	By EPD (tons CO2e)	By Average Peer EPD across Same Material (tons CO2e)	EC3 (tons CO2e)	Fuel-Based (tons CO2e)	Distance-Based (tons CO2e)	Spend-Based (tons CO2e)	EC3 (tons CO2e)	EC3 (tons CO2e)
Structure: Primary Structure Systems	Ready Mix	14,353.5 m3	5,770.1	-	5,203.4	246.3	67.2	176.6	-	64.0	12,898.51
	Rebar	2,412.3 ton	5,017.6	5,837.8	6,961.2	1,800.5	124.2	539.8	-		



MATERIAL QUANTITYGLOBAL WARMING POTENTIAL (GWP)EMBODIED CARBON

kgCO₂eq



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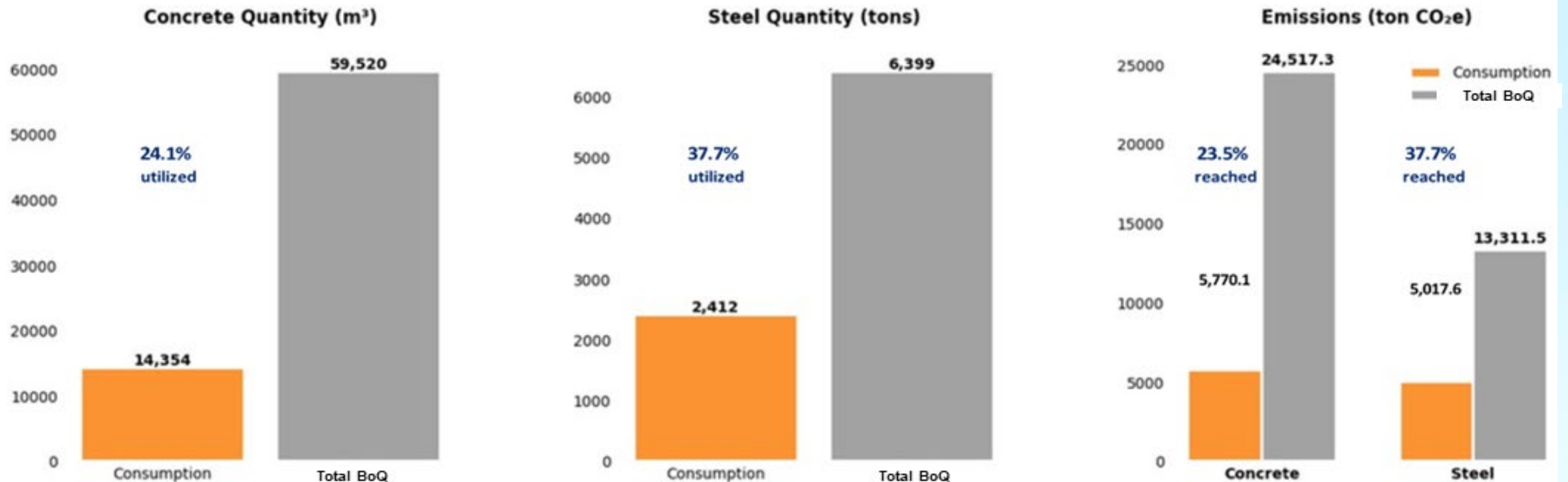
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Results



Material Impact Analysis



- ❖ Embodied Emissions (A1–A3): 417 kgCO₂e/m² (vs Denmark's WLCA benchmark 400 kgCO₂e/m²)
- ❖ Transport (A4): Initial value was 67 kgCO₂e/t-km based EC₃ default EF → Fuel-based 9.0 kgCO₂e/t-km (vs Denmark's WLCA benchmark 75 kgCO₂e/t-km)



Learnings from the pilot:

- Securing EPDs essential for accurate result.
- Periodic reporting and documentation of material consumption
- Check BoQ vs. actual use for consistency.
- Cement & steel dominate embodied emissions → innovation needed

Next Steps

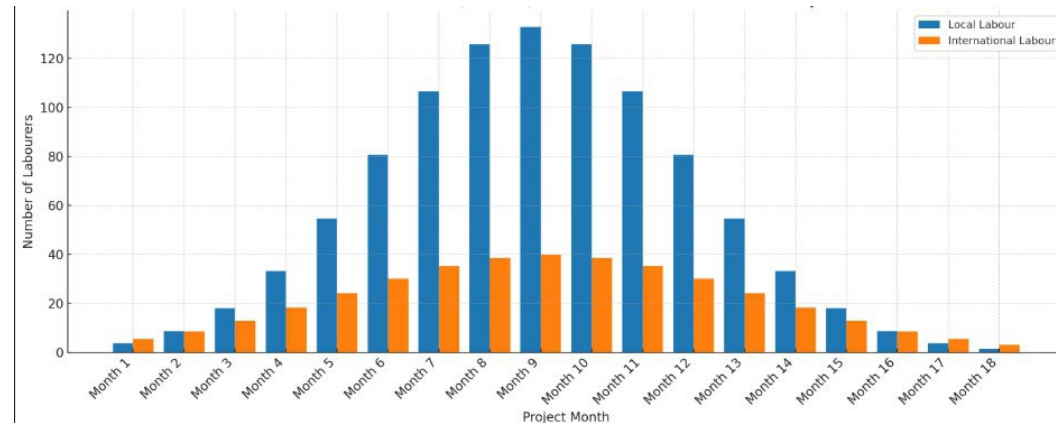
- Expand data collection to all materials & transport routes
- Scale up across ADB's portfolio through integration into digital solution.

Approach

Qualification Criteria

- As a minimum, **50 % of the workforce shall be local labor**
- Applicable on 1 January 2026; transition arrangements will apply.
- Lower threshold permitted in certain situations (e.g., SIDS) if justified in procurement strategy.
- **Calculation by person days**

Required on internationally advertised contracts, recommended elsewhere



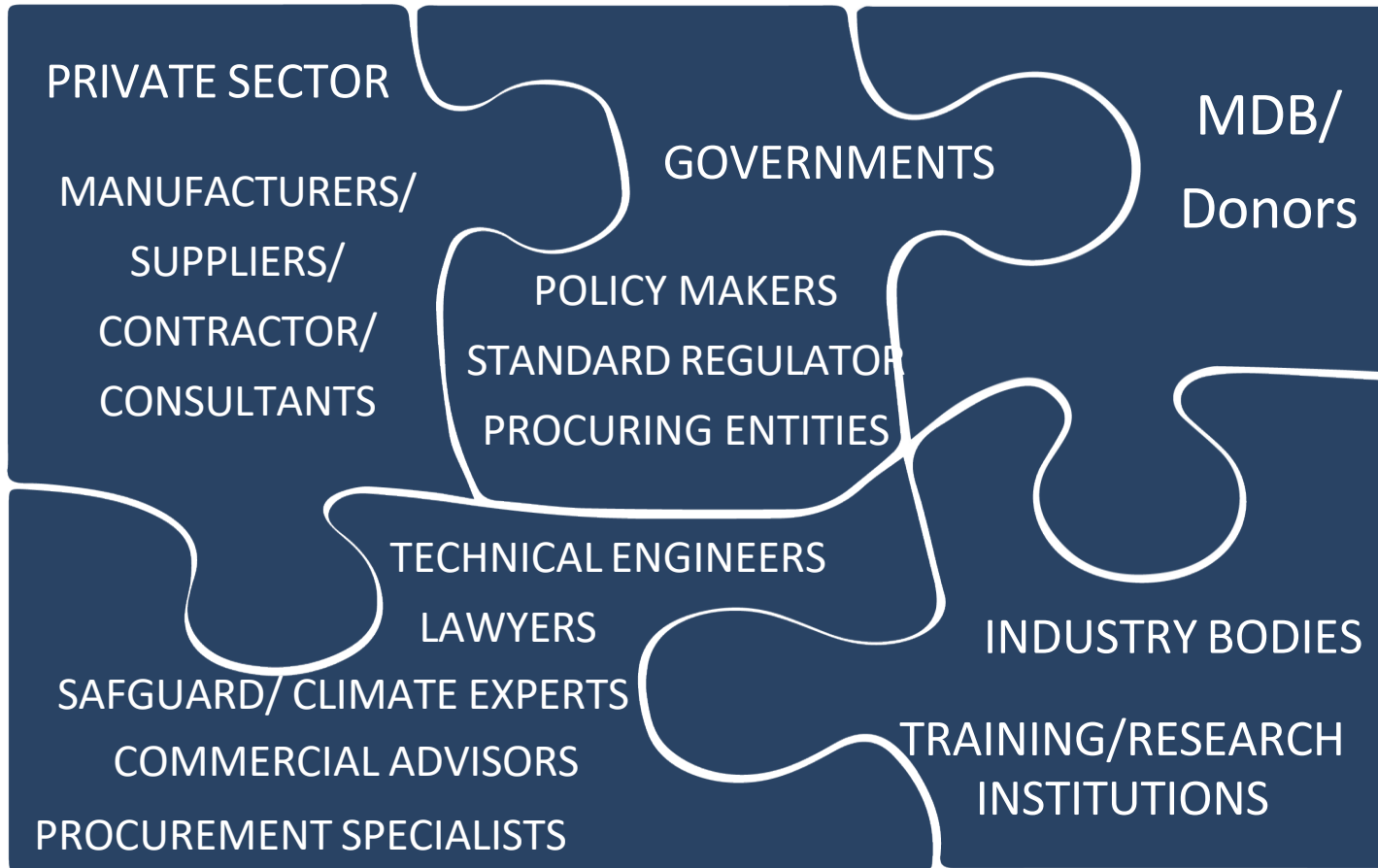
Approach

Merit Point Criteria

- Option to include scoring up to 15 % in MPC evaluation for:
 - Maximizing use of local resources (JV, subcontractors, materials, equipment labor)
 - Local job creation (exceeding thresholds outlined above)
 - Local skills development proposals
- **Skills Development** covers on the job training, structured trainings, knowledge transfer etc.
- **Local Partnerships** in Innovation and Technology Transfer
- **Social Value** – impact and opportunities for local communities
- ADB collaborated with GIZ the **Build4Skills** program, establishing the template for inclusion of construction traineeship in projects.



ACHIEVE MULTIGENERATIONAL IMPACT



IT TAKES A VILLAGE

Let us know your thoughts on sustainable procurement

**ADB BOF 2025 - Sustainable
Procurement Session Market
Feedback**

