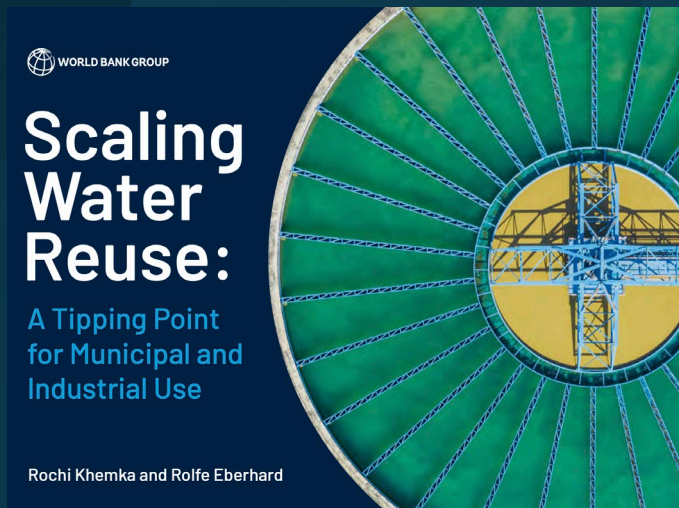


# Reuse in emerging economies

## Unlocking the double value proposition



*Framing conversation*

Global Water Summit

20 May 2026, 2-3:30pm

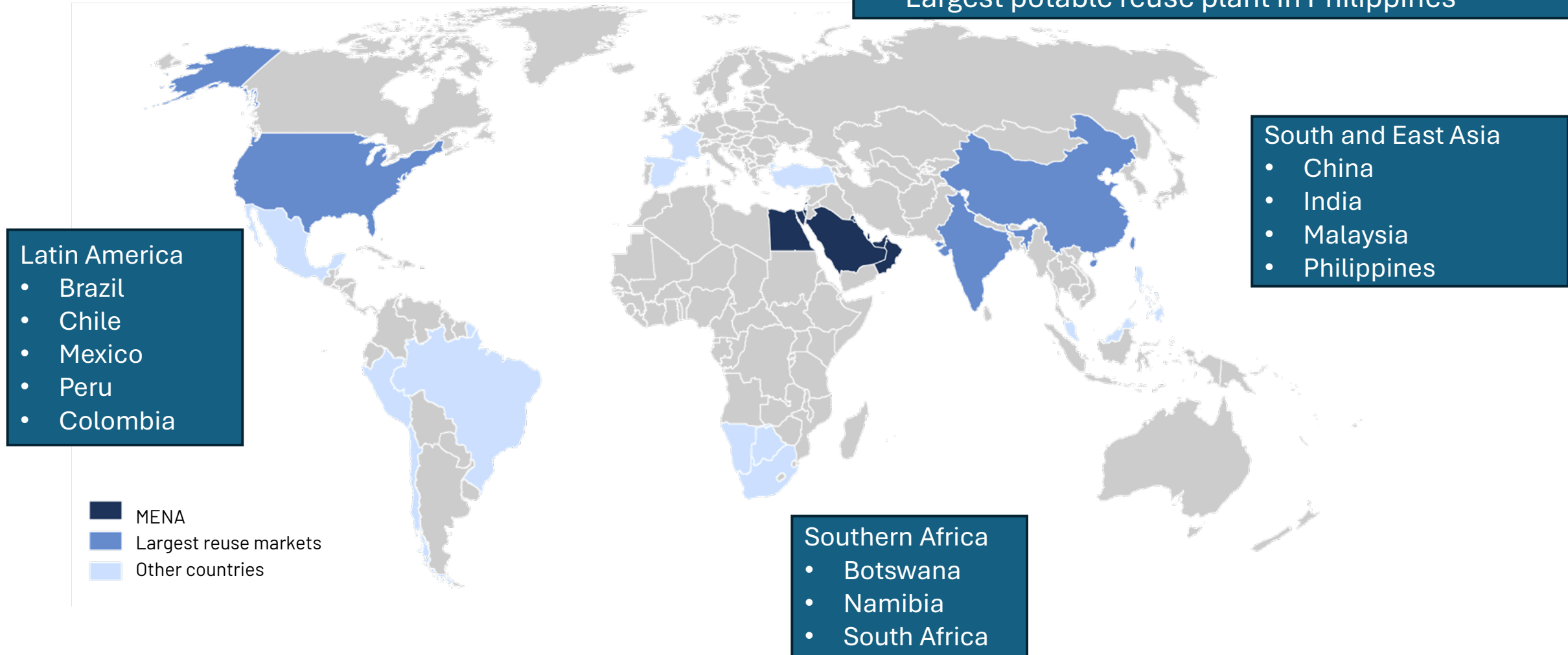
How to scale through:

- structuring bankable deals,
- aligning off-takers,
- building scalable financing templates

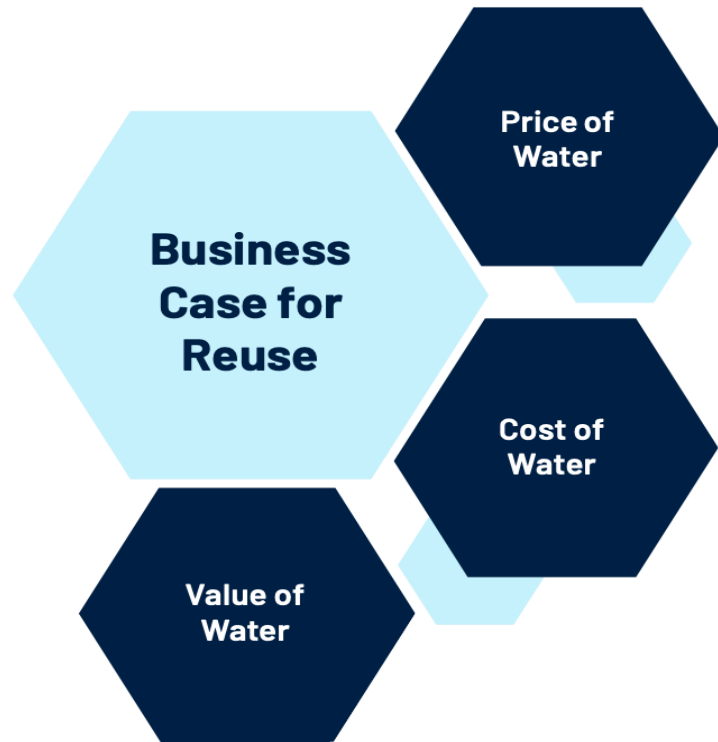
# Reuse in developing countries

- India & China have very large potential markets
- Industrial reuse dominates in India
- Significant agricultural reuse in Mexico
- Mining and industrial reuse in Brazil, Chile, Peru
- First potable reuse plant in Namibia (1960s)
- Largest potable reuse plant in Philippines

Countries with significant water reuse activity



# The business case for reuse depends on **scarcity** and **security of supply** as well as on **relative prices and costs** of alternatives



## Reuse investments more favorable where:

- Water is scarce
- Use has high value (industrial & potable )
- Alternatives priced at full cost
- Treatment infrastructure in place
- Available close to the point of use
- Treatment is combined with resource recovery

## For **agriculture**:

- Reuse often highly subsidized, and dependent on public funding
- Only viable for high-value crops
- This limits scalability that is financially

## For **industry**:

- Industries value security of supply higher than cost
- Willing to enter into long-term contracts, supporting private financing
- Effective regulation with full price costing for abstraction and discharge supports reuse

## For **potable use**:

- Cost competitive compared to desalination
- Diversifies supply in water insecure cities (eg. Cape Town, Manila, Windhoek, Singapore)
- Dependent on stakeholder buy-in (typically used in cases of severe scarcity or crisis, not yet normalised)

# Unlocking reuse in developing countries: intentional programmes not ad hoc projects

## Scaling Bankable Water Reuse Projects through Stakeholder Mobilization and Cost Reduction

Prepared for the World Bank's 2030 Water Resources Group

School of International and Public Affairs, Columbia University

Demas Laswanda, Feifei Zhang, Iman Shah, Joel Siagian, Meiwa Narumi

Faculty Advisor: Daniel Shemie

Establish policy intent and regulatory coherence

Build a programme, starting with high value applications with derisked long term off-takes

### Phase 1 Create Upstream Conditions

*Satisfy the readiness checklist before committing capital*

Regulatory coherence established with a clear mandate and single agreed process

Fit-for-purpose standards adopted, reducing regulatory conservatism and overdesign

Industrial anchor demand identified and co-located with source before design begins

***"Without regulations, utilities did not know how to plan — they could not scope or cost projects. Having regulations — even stringent ones — provides the certainty that allows planning and investment decisions to move forward." - California Water Specialist***

### Phase 2 De-risk the First Cohort

*Blended finance creates conditions for commercial finance to follow*

Concessional capital deployed across a programmatic pipeline of 10–15 projects

Long-term offtake agreements structured and contracted before financial close

Finance de-risking instruments structured upfront

***"Private investors might be worried about the downside risk. You have to design the public side of the blended finance to offset that. There are first-loss agreements, insurance mechanisms, price contracts." - Columbia University Professor in Development Practice***

### Phase 3 Let the Market Take Over

*As learning accumulates and risk perception falls, commercial finance steps in*

Reuse outcompetes desalination on cost in markets with established demand signals

Programmatic pipelines attract private developers without public de-risking

Country-level institutions self-manage regulatory evolution and standard-setting

***"We're the first... every subsequent project will benefit from the learning." - Phoenix Water Specialist***

# Panel discussion

- **Narendran Maniam** – CEO of Indah Water Konsortium, Malaysia
- **Andrew Hammond** — GM New Business, Nafasi Water
- **Lewys Isaac** — Water Stewardship Manager, Primark
- **Jack Zhang** — CEO of BlueNexus Technologies