



“The Climate Finance Challenge: Financing of Renewable & Clean Energy”

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Industry-Leading Corporate Sustainability

(USD in billions)

Goal Sustainable Financing (2014-2024)

\$100 B



2014 - 2024 Goal

Actual Sustainable Financing by Citi 2013-2015

\$72 billion

\$10 B



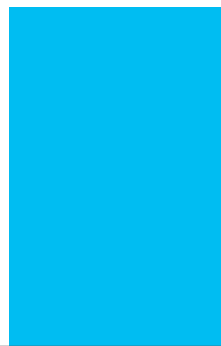
2013

\$24 B

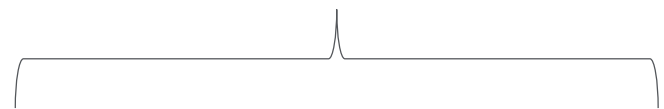


2014

\$48 B

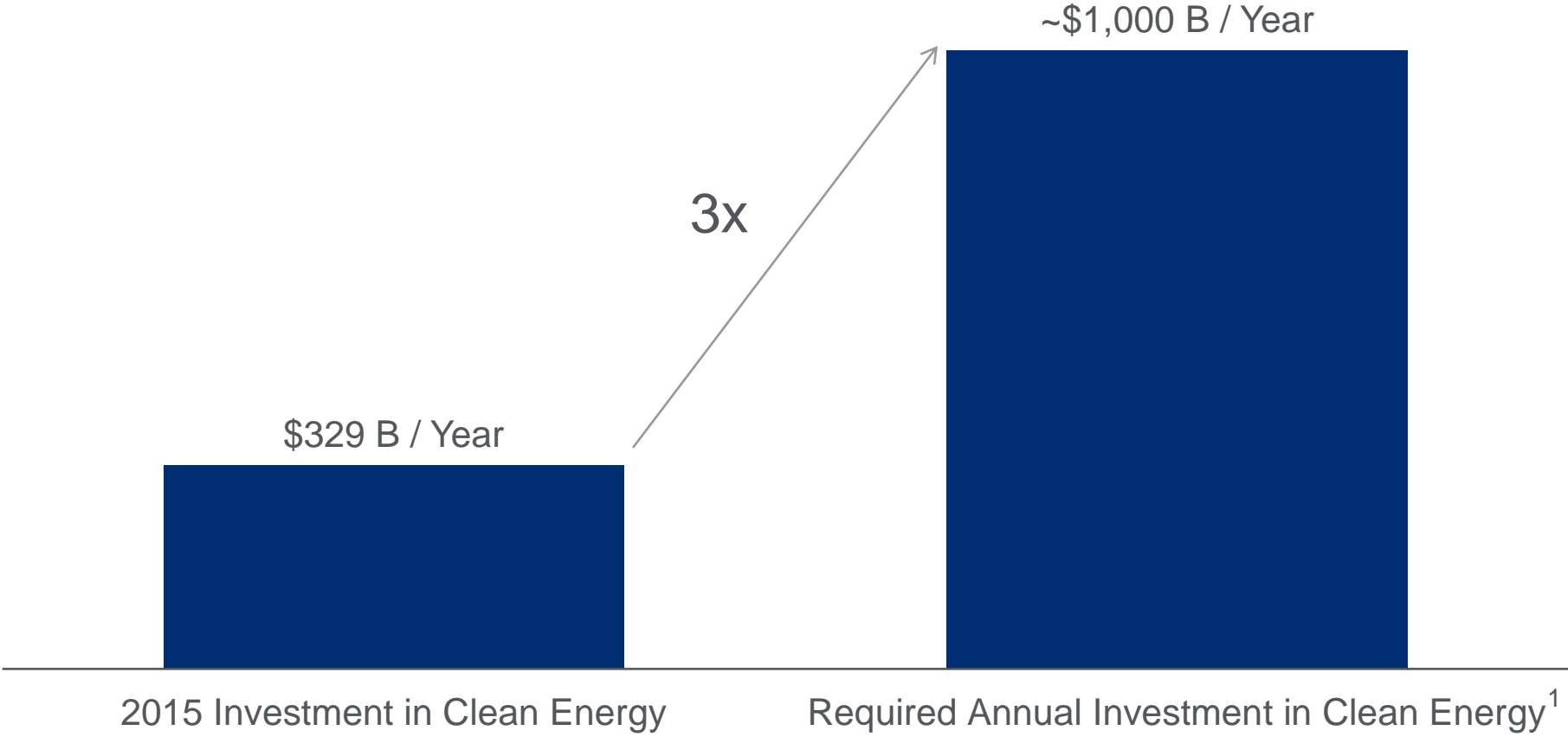


2015



Capital Needed to Fund / Finance Climate Challenge

(USD in billions)



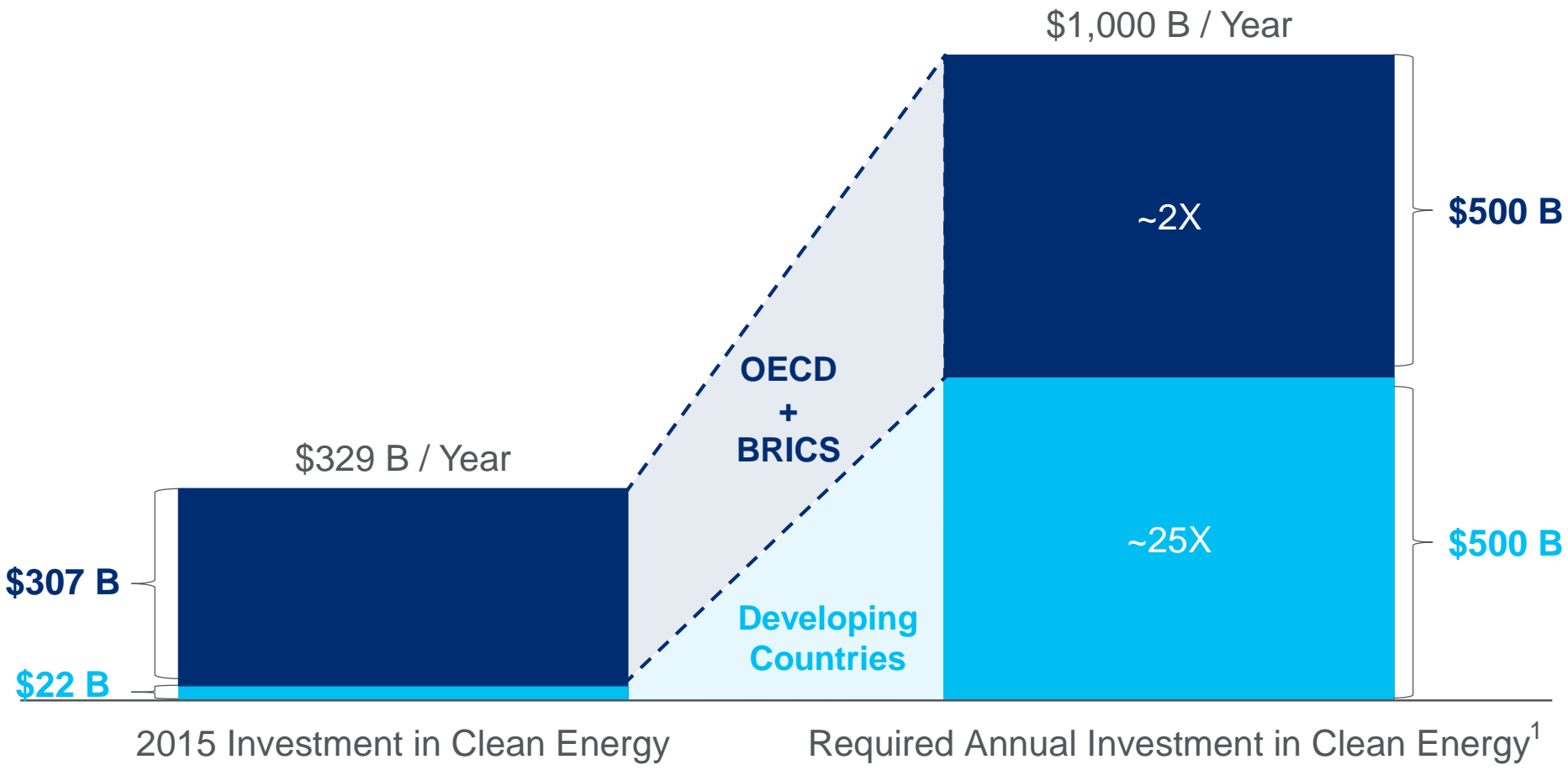
Source: International Energy Agency (IEA); Coalition for Environmentally Responsible Economics (CERES), Bloomberg New Energy Finance (BNEF).

1. Annual investments required to limit the increase in global temperature to 2 degrees Celsius above pre-industrial levels.

Capital Needed - Greater Insight

(USD in billions)

Developing Countries Need a ~25x Increase!



Source: International Energy Agency (IEA); Coalition for Environmentally Responsible Economics (CERES), Bloomberg New Energy Finance (BNEF).

1. Annual investments required to limit the increase in global temperature to 2 degrees Celsius above pre-industrial levels.

The Public and Private Sectors are Quite Different



Public Sector

- Policy-driven capital allocation
 - Annual budgets with funds going to projects
- Highly capital constrained
 - Indebted as much as 100% of GDP
 - Not able to fund climate solutions alone

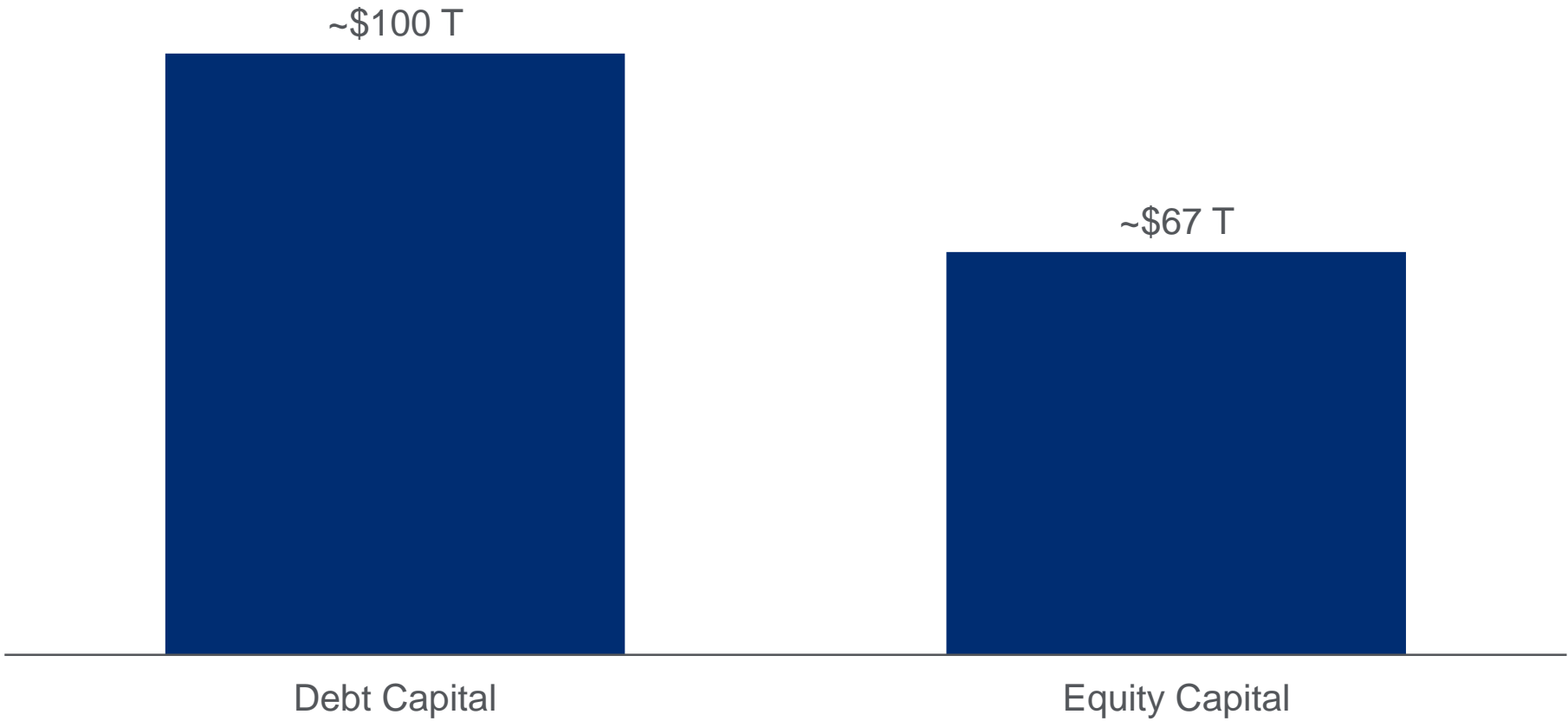


Private Sector

- Client-driven determination of use of capital
 - Management of pools of capital on a continuous basis
- Not capital constrained
 - Can access multi-trillion dollar debt and equity markets

Size of Debt and Equity Capital Markets: Total Invested Today

(USD in trillions)



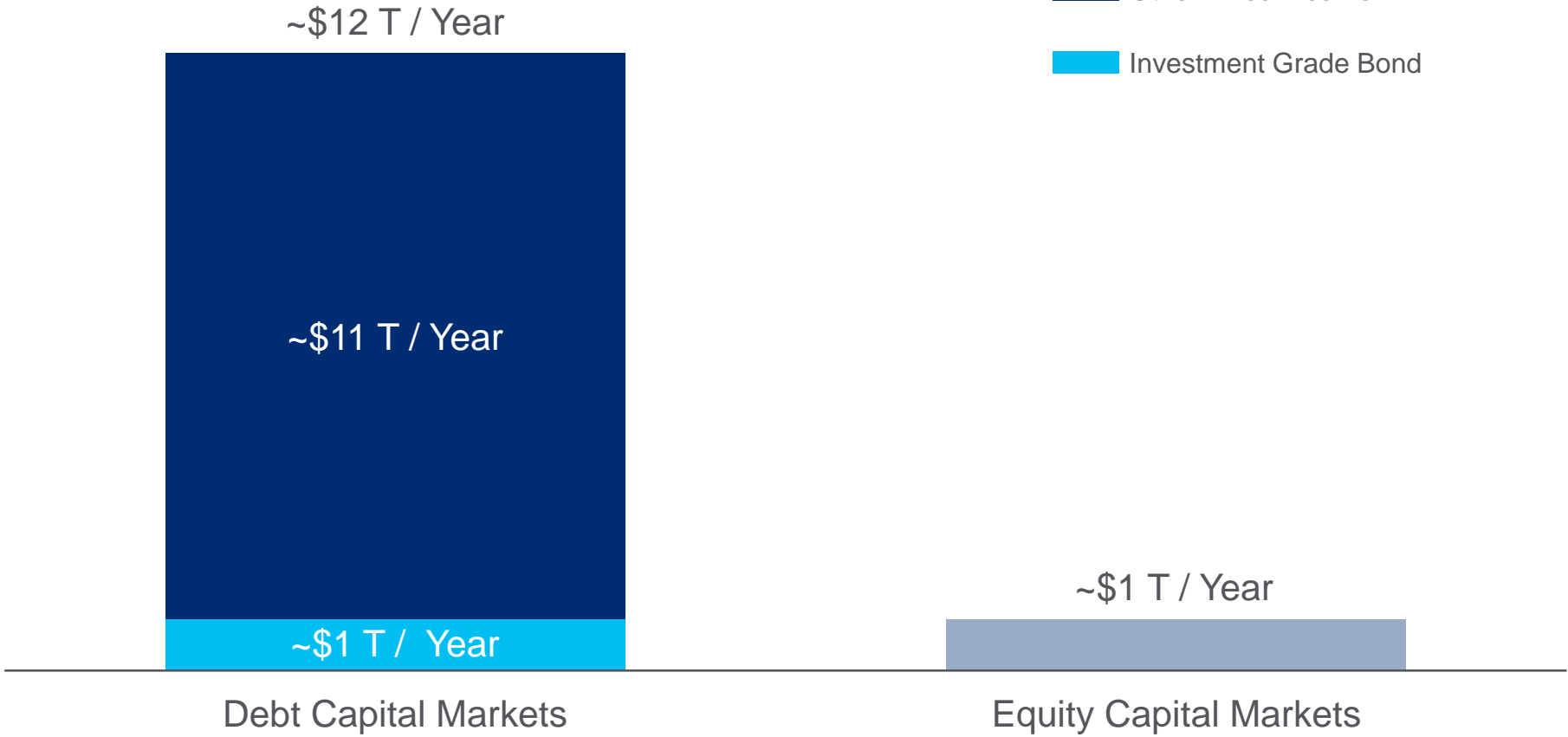
Source: United Nations Environment Program (UNEP).

New Issuances in Capital Markets (2006 – 2016 Average)

(USD in trillions / year)

Legend

- Public Equity
- Other Fixed Income
- Investment Grade Bond

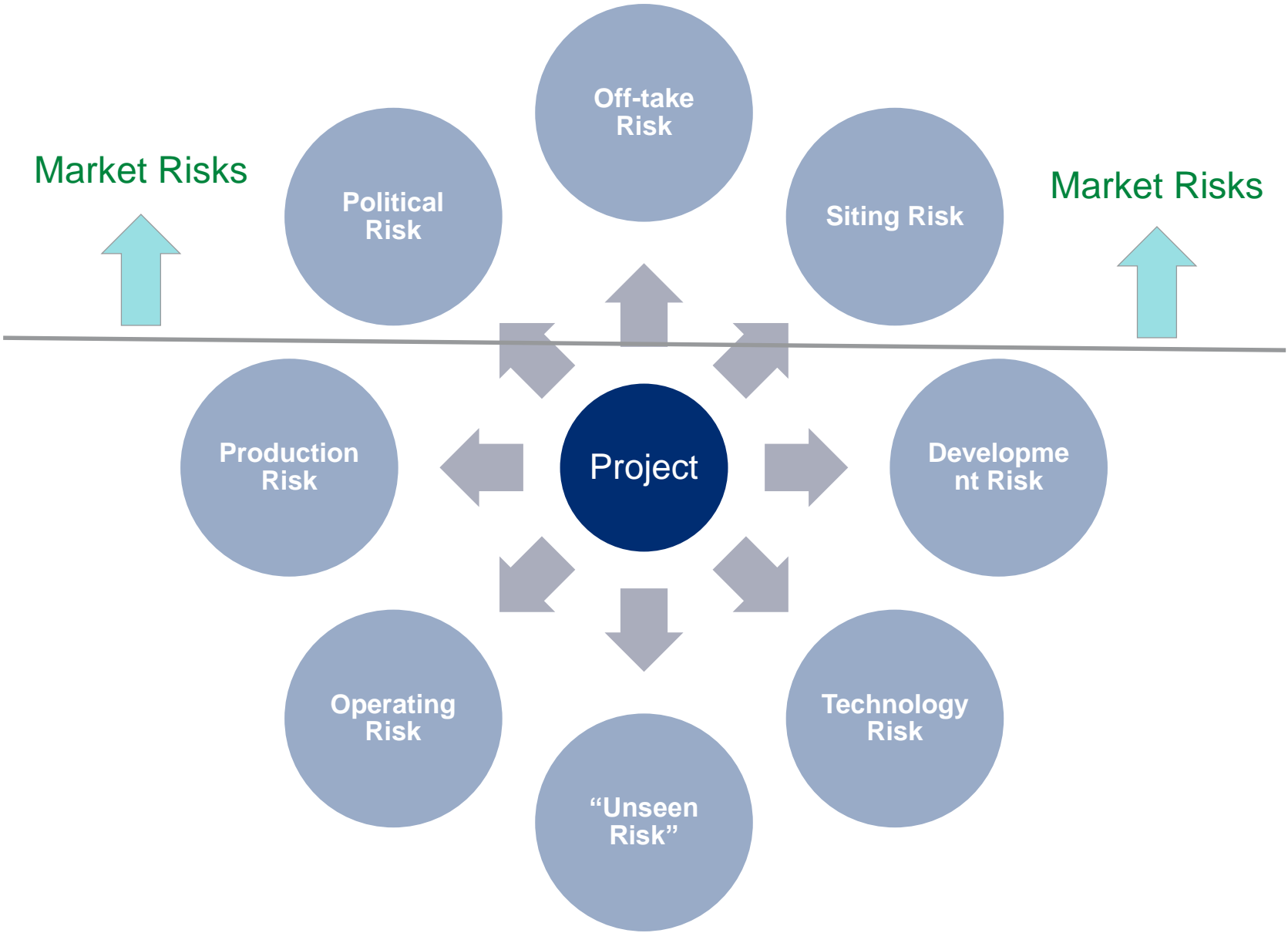


Source: Dealogic.

Project Risks to be Addressed



Project Risks to be Addressed



Summary

- Climate change is a reality that we can measure and track
- There is a need to increase investment levels in clean energy:
 - A 2x lift in the OECD and BRICS countries
 - A 25x lift in the developing countries
- The public sector cannot do it alone
- The Debt Capital Markets have sufficient funds to meet the need
- Key to attracting debt capital is reducing risk
- A suggestion is made to establish a global regime of off-take guarantees for clean energy projects everywhere
- Through CEPAC or its equivalent, the public and private sectors can work effectively together to finance climate solutions everywhere, now.



Thank You

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