Technology Facilitation: the Role of the UN

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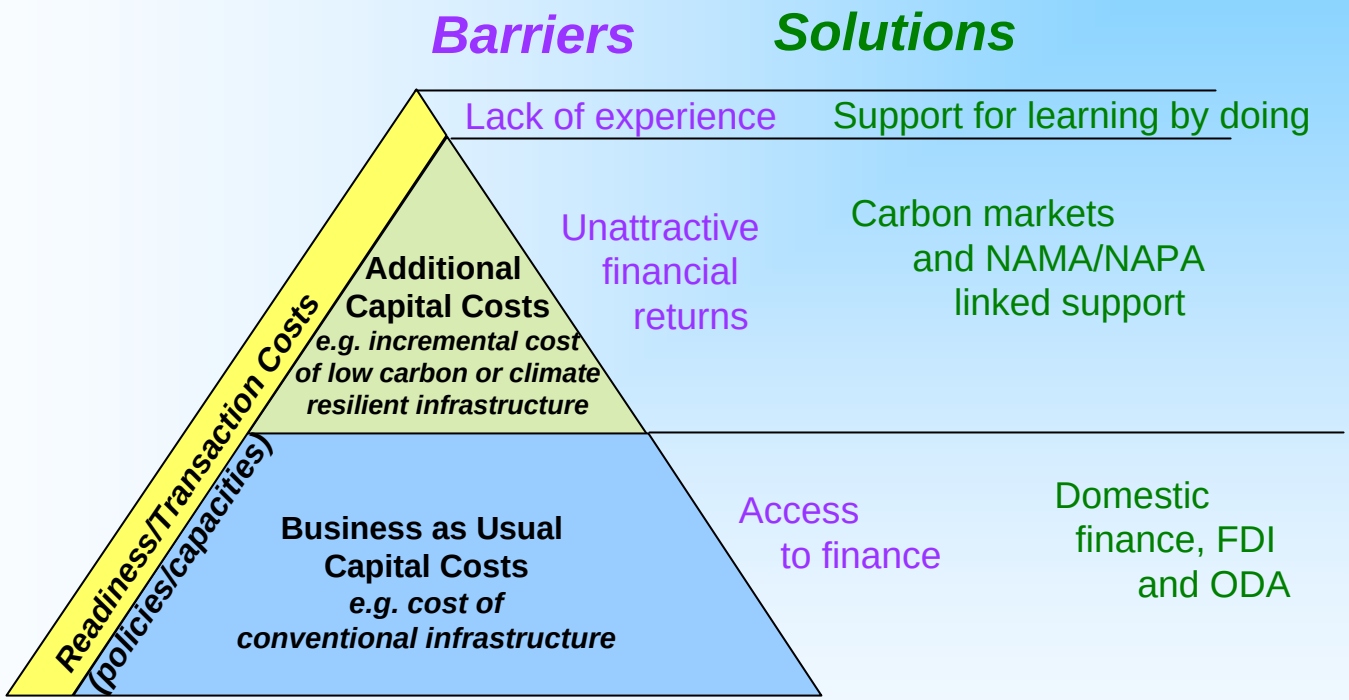
IPCC *Special Report on Technology Transfer* - definitions

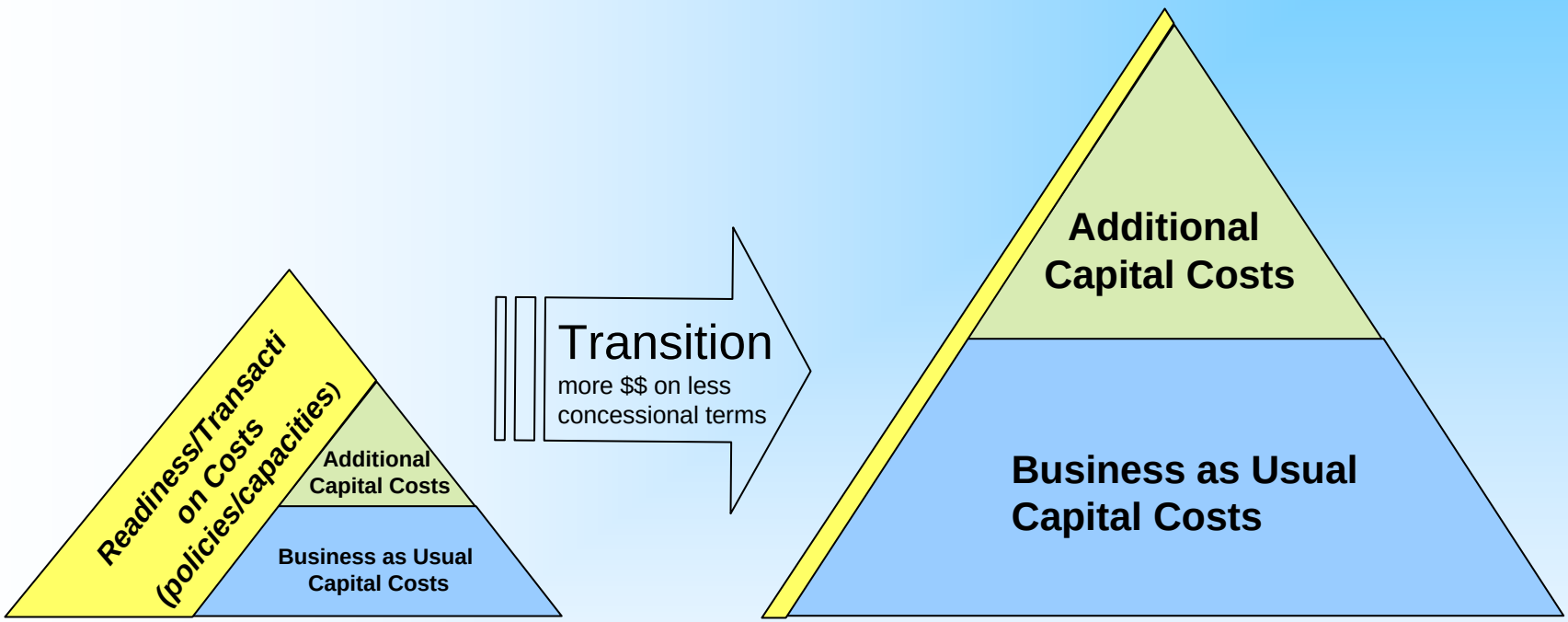
- "Technology Transfer" - a broad set of processes covering the flows of know-how, experience and equipment
- TT encompasses diffusion of technologies and technology cooperation across and within countries
- It comprises the processes of learning to understand, utilize and replicate a technology, including the capacity to choose it and adapt it to local conditions and to integrate it with indigenous technologies

Linking technology and finance



Too much emphasis has been on ensuring access to finance. This is not enough!

Phasing the support is important



Phase 1 – Creating Readiness

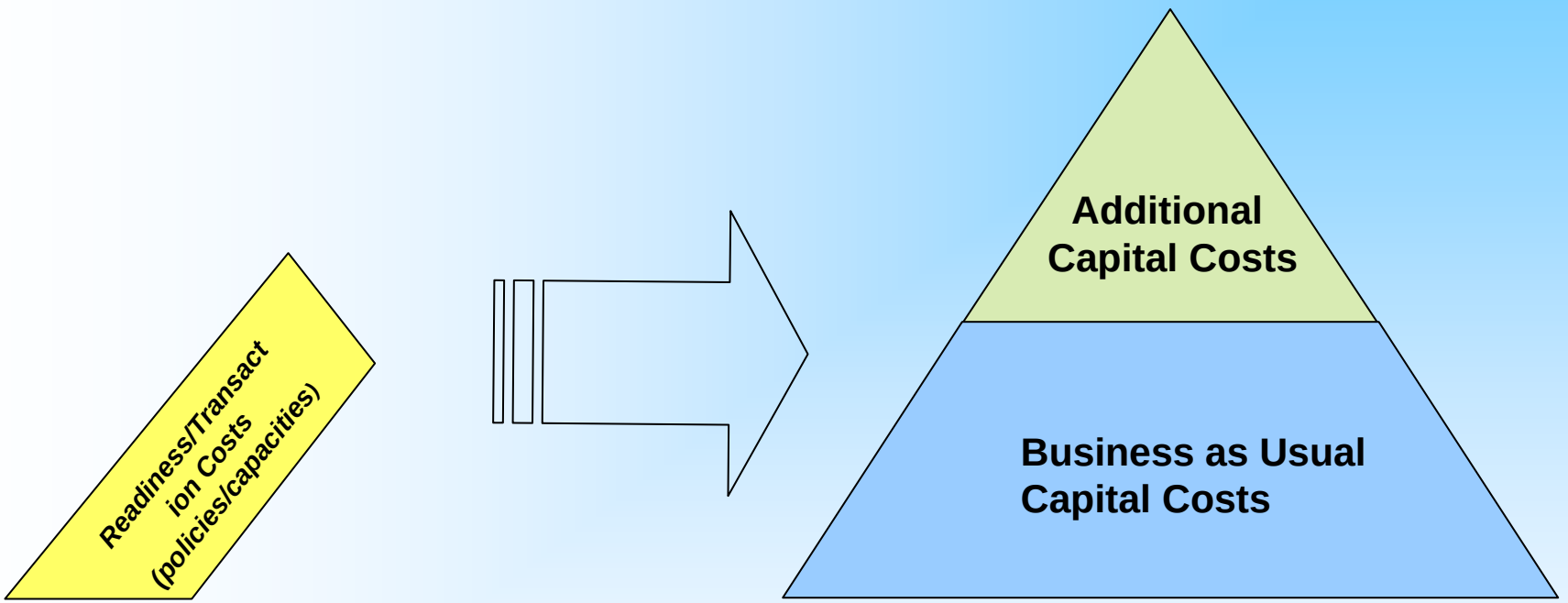
- building capacities and
- mobilizing early investments

Phase 2 – Full Scale Investment

- maintaining human/institutional capacities
- paying for additional costs through carbon/NAMAs/NAPAs
- maintaining access to finance

Take a phased approach, with different support provided during each phase.

The wrong approach



Phase 1 – Creating Readiness

Phase 2 – Full Scale Investment

Don't separate capacity building from mobilizing investment.

Finance alone is not enough

- **Finance is vital, but finance alone is not enough.** A major barrier for climate change / clean energy finance (in developing countries in particular) is generating the demand for and the capacity to absorb and deploy investment.
- This is sometimes referred to as the readiness or pre-investment phase.
- **The readiness element should be an integral part of any future climate mitigation funding mechanism.** Blending the two will create maximum learning in both the public and private sectors.

What is Readiness / Pre-Investment?

- **Policy Support:** analysis of policy options, developing policy roadmaps, reviewing and undertaking legislative and policy reform
- **Pre-Investment Support:** country investment strategies, assessment of renewable energy resources potential, technology needs assessments, analysis of investment options for low-carbon development
- **Creating bankable projects** by buying down initial costs and reducing transaction costs
- **Early actions** to test out options for promoting climate resilience, low carbon growth and achieving other ‘quick wins’ in mitigation and adaptation.

Menu of Quick Start services

Mitigation and Technology – Renewable Energy

- Building capacity in developing countries to prepare **low emission development plans** and supporting **MRV**
- Regional **technology centres and climate change networks**
- Strengthening developing country capabilities for preparation and implementation of **Clean Development Mechanism** projects
- Support in developing **National Technology roadmaps** and regional technology market assessments
- Up front capability-development and support for expanded investment in **clean energy technologies**
- Local bank support to **upscale financing** for small scale clean technologies

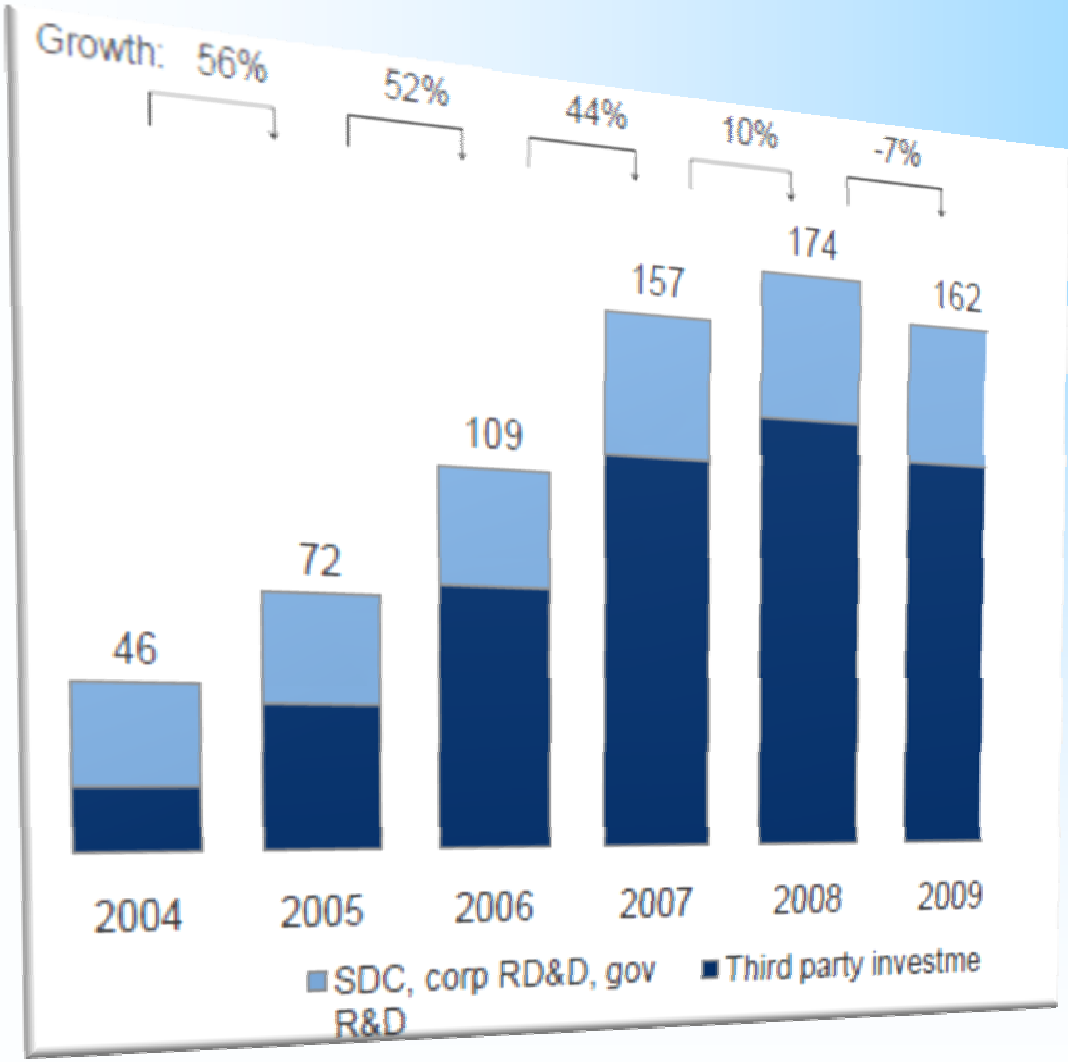
End

Main messages

There are no single or simple solutions:

- Action needs to combine different policies and approaches. Solutions that address both climate change, expanded access, and energy security at the same time are best from an energy perspective
- Long-term and predictable policy support is crucial to develop and sustain markets and industries
- Market forces should be used where appropriate, but solutions are individual and no single solution exists
- There is lots of political, economic and institutional resistance to overcome. Heightened awareness based on solid information and credible data regarding technologies, policies, and costs is critical.

GLOBAL NEW INVESTMENT IN SUSTAINABLE ENERGY, 2004-2009, $ BILLIONS



Source: Bloomberg New Energy Finance

2009 INVESTMENT

$119 billion raised capital

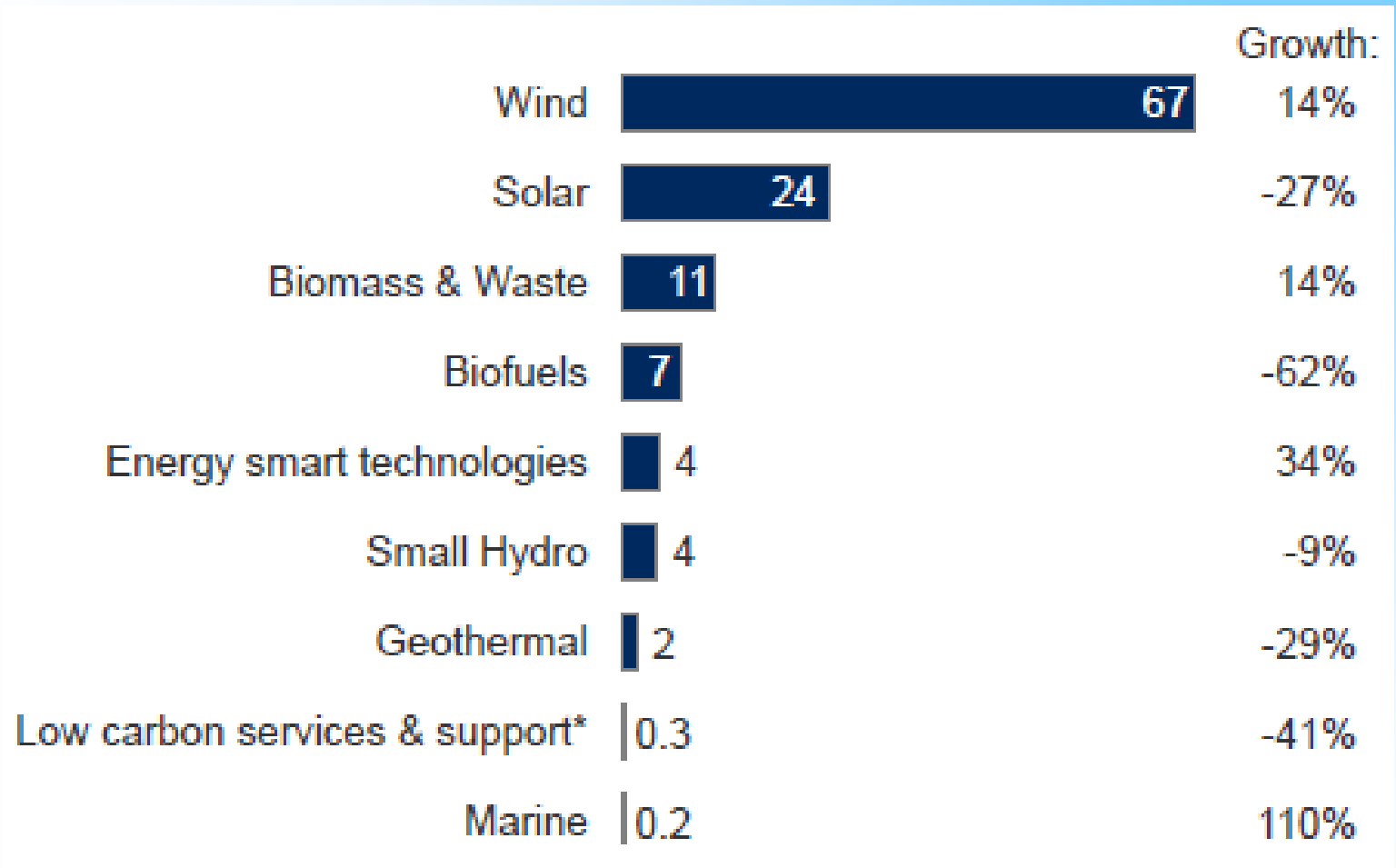
Public market investment $14.1 billion

Private Equity $4.1 billion

R&D $24.6 billion (50% Public)

Venture Capital Funds $2.7 billion

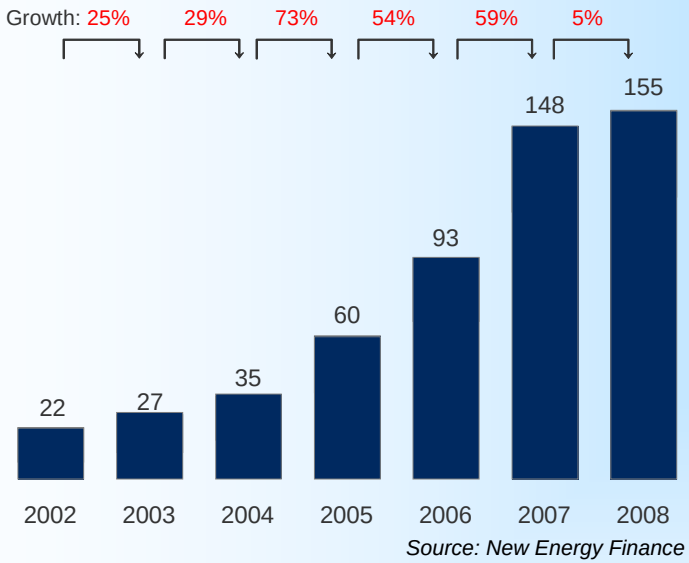
FINANCIAL NEW INVESTMENT BY TECHNOLOGY, 2009



Source: Bloomberg New Energy Finance

Investment Trends in Sustainable Energy

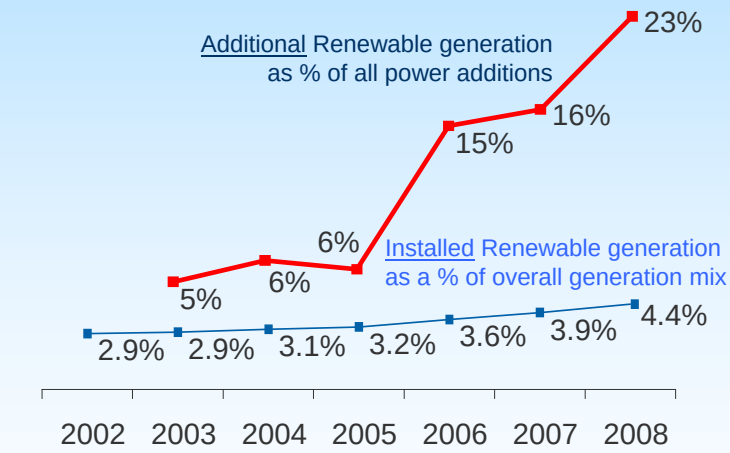
Global New Investment in Sustainable Energy
2002-2008, $ billions



Source: New Energy Finance

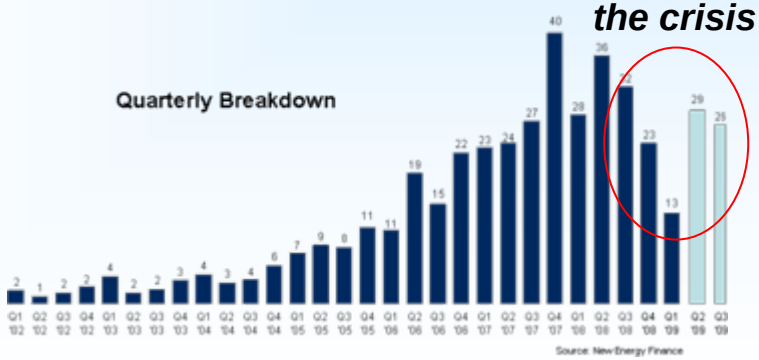
Are Renewables becoming 'business as usual' ?

New Renewables* Generation as a proportion of global power sector



** Excluding Large Hydro* *Source: New Energy Finance, UNEP SEFI*

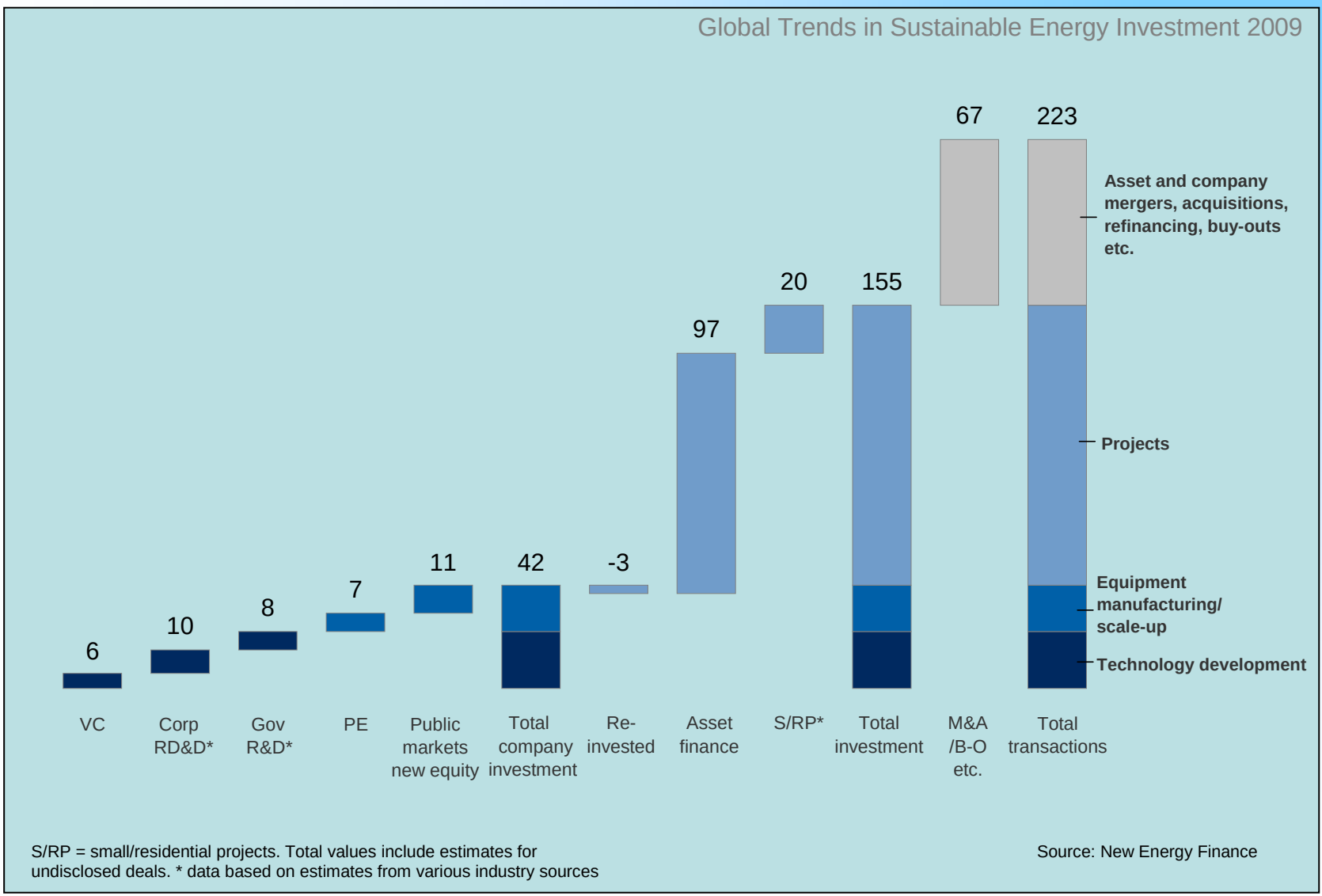
Impact of the crisis



2008 Milestone:

For the first time all renewables (incl. large hydro) attracted more power sector investment (~$140bn) than fossil-fueled technologies (~$110bn)

Global Transactions in Sustainable Energy, 2008, $ billions

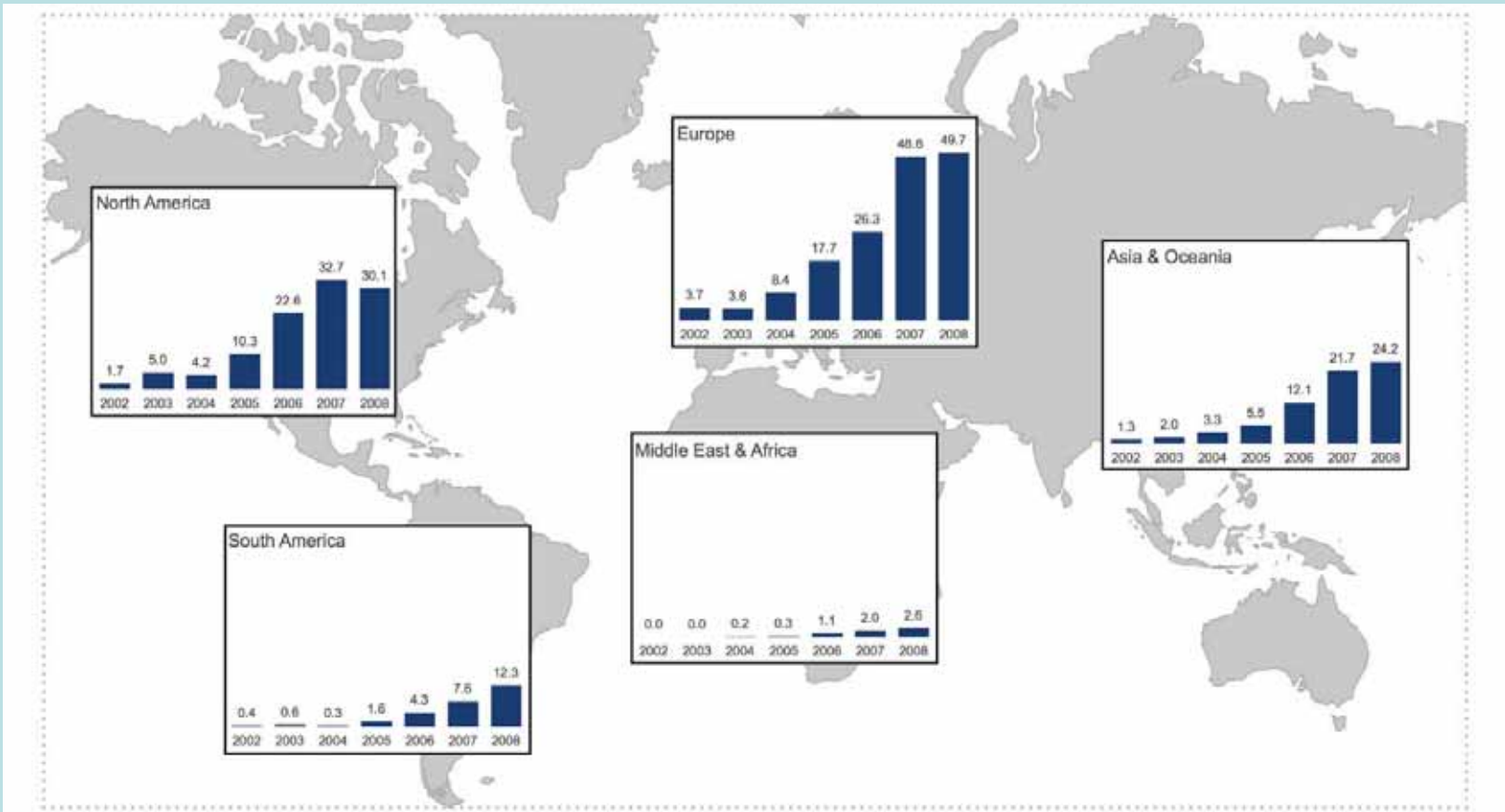


S/RP = small/residential projects. Total values include estimates for undisclosed deals. * data based on estimates from various industry sources

Source: New Energy Finance

Financial New Investment by Region 2002-2008

Global Trends in Sustainable Energy Investment 2009



New investment volume adjusts for re-invested equity.
Total values include estimates for undisclosed deals

Source: New Energy Finance, UNEP SEFI

Financial New Investment, by Technology
$ billions