



**Innovative approaches for
additionality: key issues to
consider to safeguard
environmental integrity**

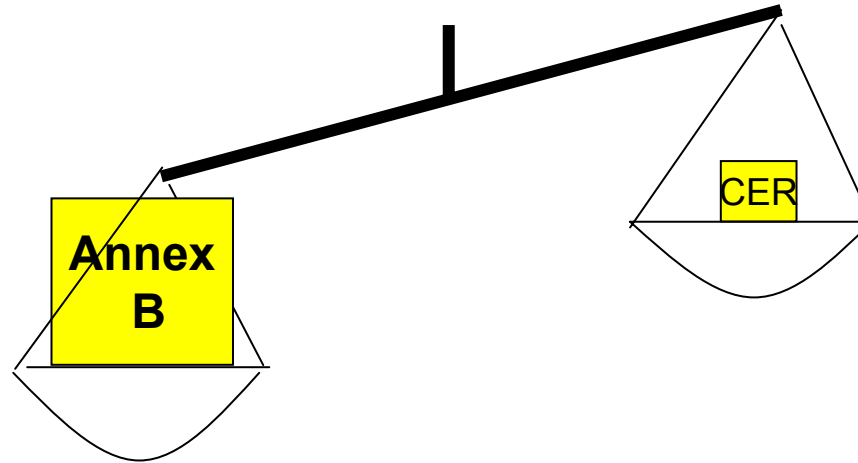
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- **Additionality – key principle** of the CDM
- **When** is environmental integrity respected?
- The additionality **conundrum**
- **Shortcomings** of current additionality tests
- **Tradeoffs** between stringent additionality determination and **scale-up** of the CDM
- **Sector-specific challenges** to additionality determination
- **Policy recommendations**



A CER not backed by a real reduction increases emissions worldwide!

Would a project have happened without the CDM?



Additionality interpretation for environmental integrity

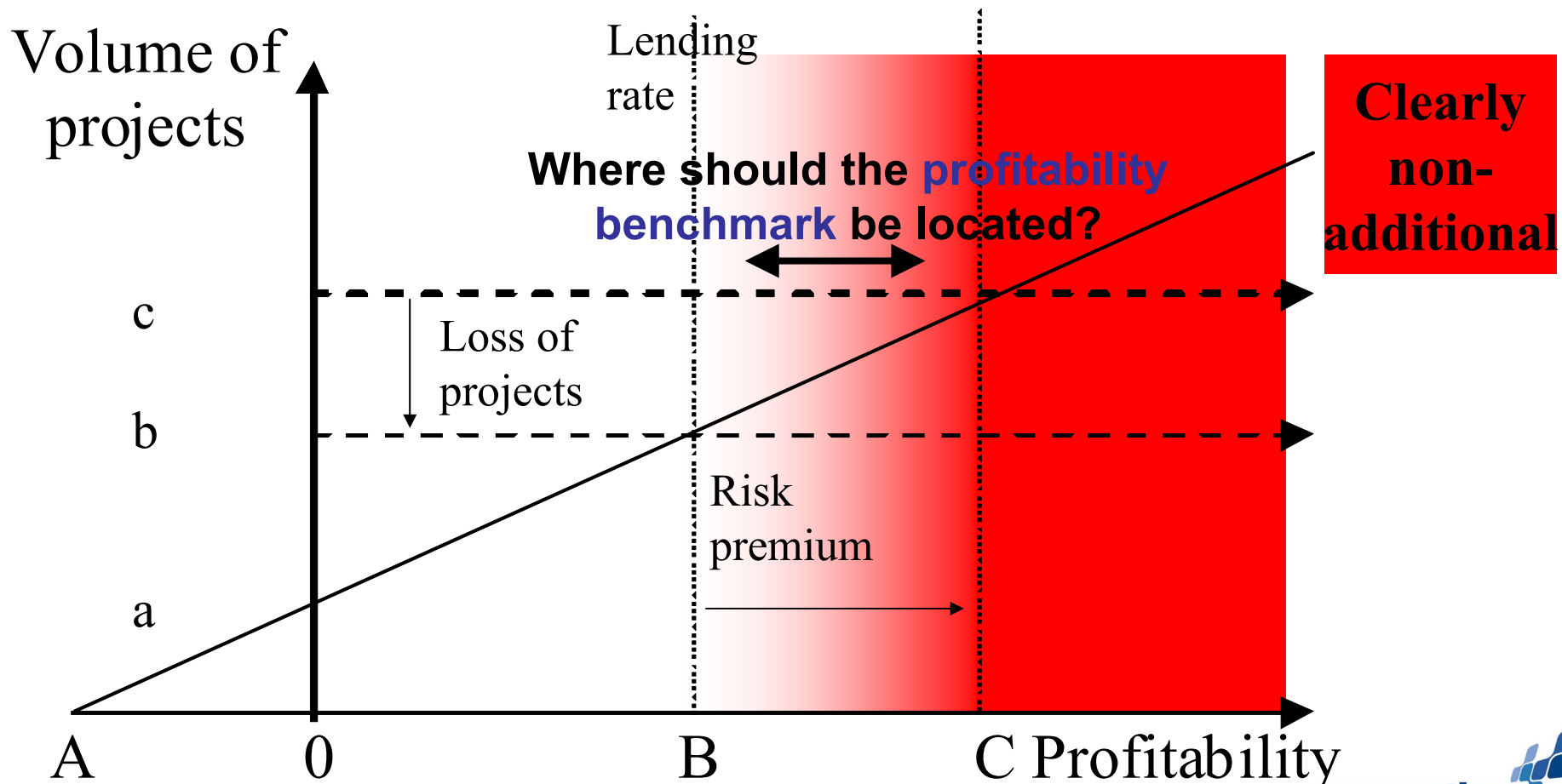
- CDM project is **not business-as-usual**
 - CDM project only happens due to the **incentive provided by the revenues from CER sales**
- Understand **why** project developers engage in a project!
 - Understand **drivers of company behaviour**
 - **Profitability**
 - **Opening new markets and testing new technologies through loss-making projects**



Additionality through theoretical economic lens

- If companies behave **perfectly rationally**, they implement all projects that generate a **positive net present value** at a **discount rate** equal to the **lending rate of commercial banks**
- In a world of **risk-averse** companies, companies will use a discount rate that is **higher** than the lending rate
- In reality, **risk aversion** of companies **differs**
 - Zero risk aversion: loss of projects!
 - Median risk aversion: **balance** of projects **lost** and **non-additional projects approved**

Additionality conundrum





Shortcomings of current additionality tests

- **Investment test**
 - **Too much flexibility** that allows to game the numbers
 - **High complexity** and **lack of DOE competence**
 - **Freedom to choose risk premium**
 - **EB 61 WACC decision not helpful**
- **Barrier test**
 - **No indicators** for prohibitive nature of barrier
 - **Assessment requires excellent knowledge of local conditions**
 - **Generic mistrust**

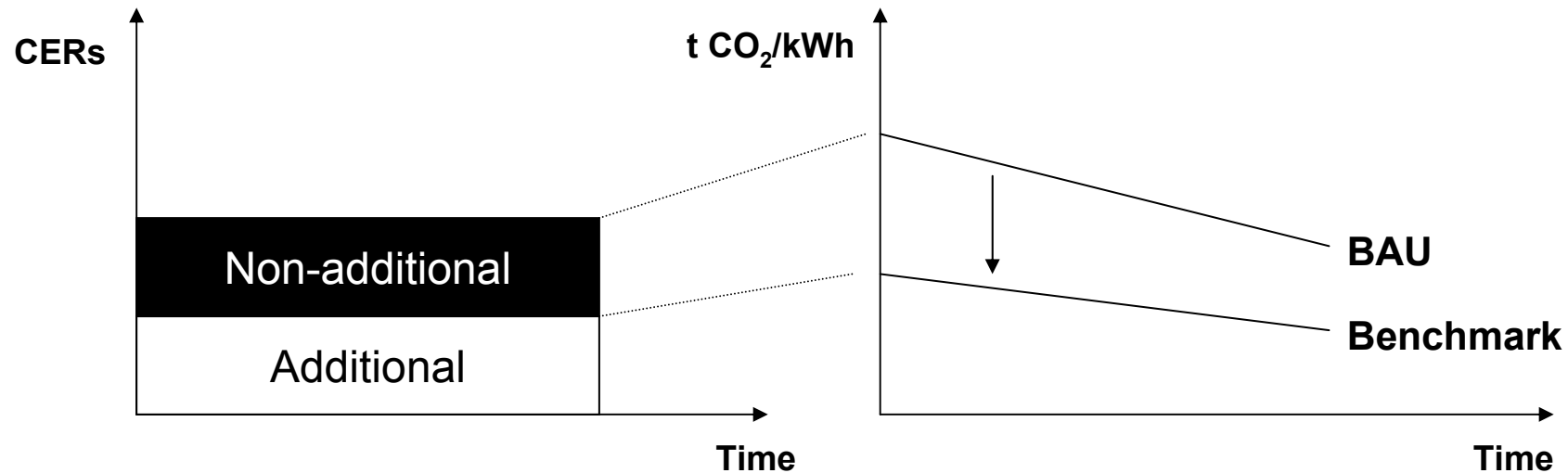


- **Project developers argue that CER revenue cannot be used to make projects bankable, especially due to post-2012 uncertainty**
 - **Still record number of CDM projects enters the pipeline!**
 - **Unilateral** – do have access to equity
 - **Are not additional?**
- **For many large-scale projects, CER revenues only cover a very small share of the investment costs (1-2%)**
 - **Can CDM ever become the real driver of such projects?**

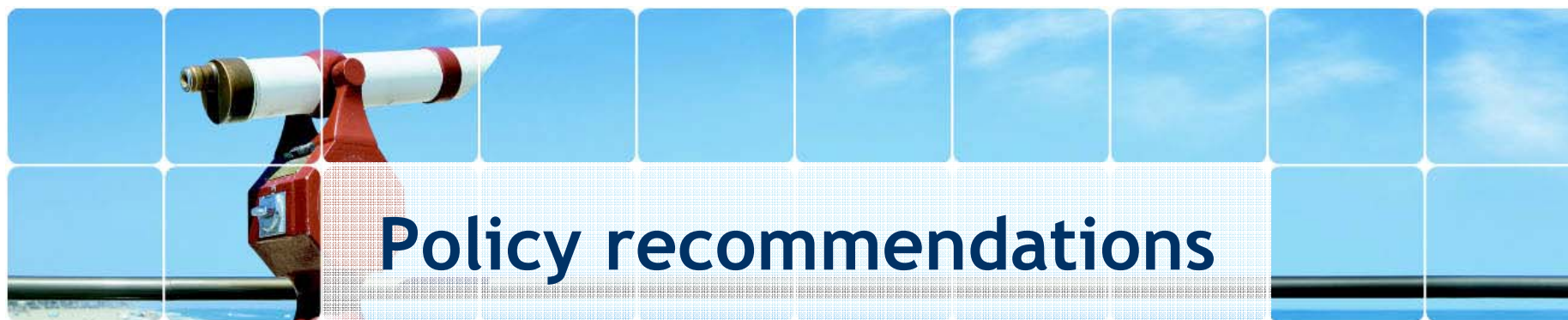


Sector-specific challenges

- **Some sectors are dominated by non-economic behaviour**
- **Demand-side energy efficiency**
 - **Short time horizon** of individuals
 - **High transaction costs**
 - **Mainly decision making on payback period**
- **Public transport**
 - **Mostly never profitable**
 - **Very long lifetime** beyond crediting period

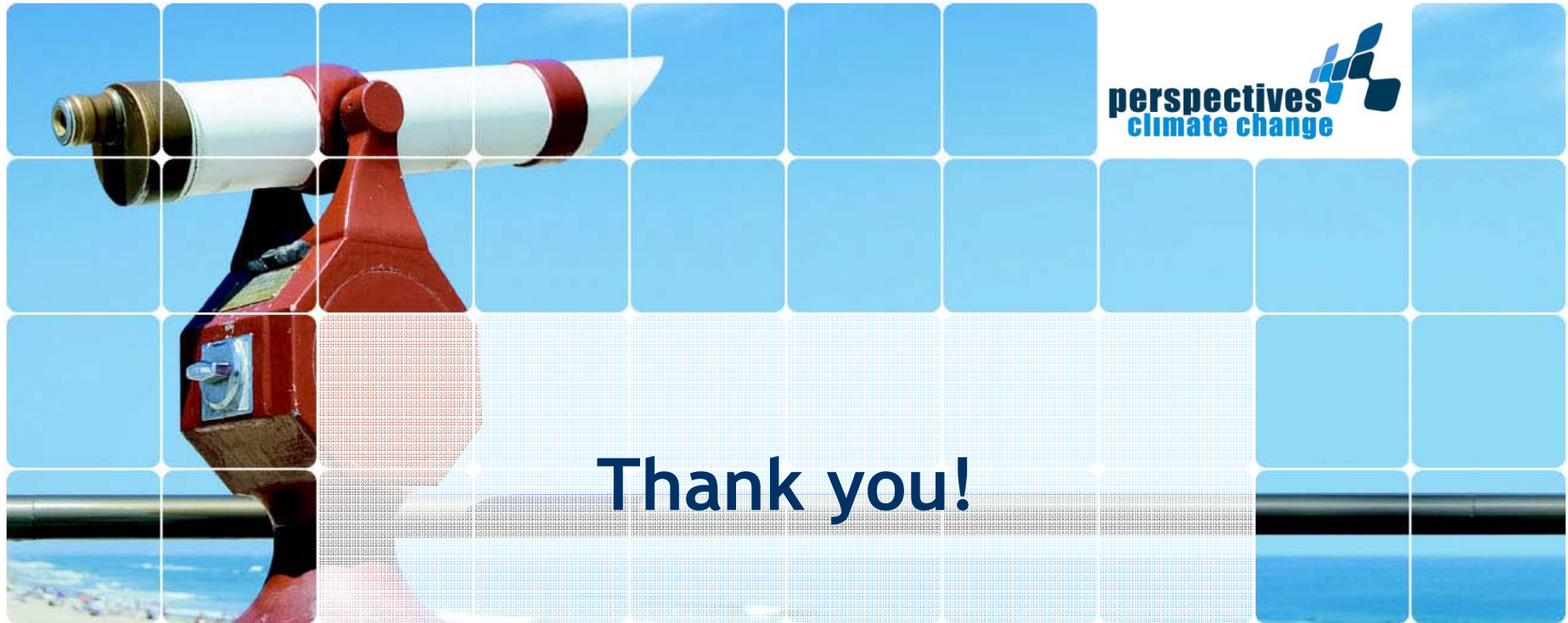


- Finding the benchmark level that **exactly separates** additional from **non-additional** projects is very difficult
 - Likely to differ between **sectors** and **technologies**
- Benchmark cannot be changed quickly due to **changes in external circumstances**



Policy recommendations

- Introduce **default profitability benchmarks** on country level for investment analysis
- Introduce **payback-period** based investment tests for projects in demand-side energy efficiency
- **Expand positive list** of technologies that do not generate revenues other than CERs
- **Exempt public transport projects** which clearly will never be profitable from additionality testing
- Commission research on **benchmark level** for key technologies that captures additionality



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