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Center for Comparative and International Studies (CIS)

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# Lessons from the CDM for the design of new mitigation policy instruments involving developing countries

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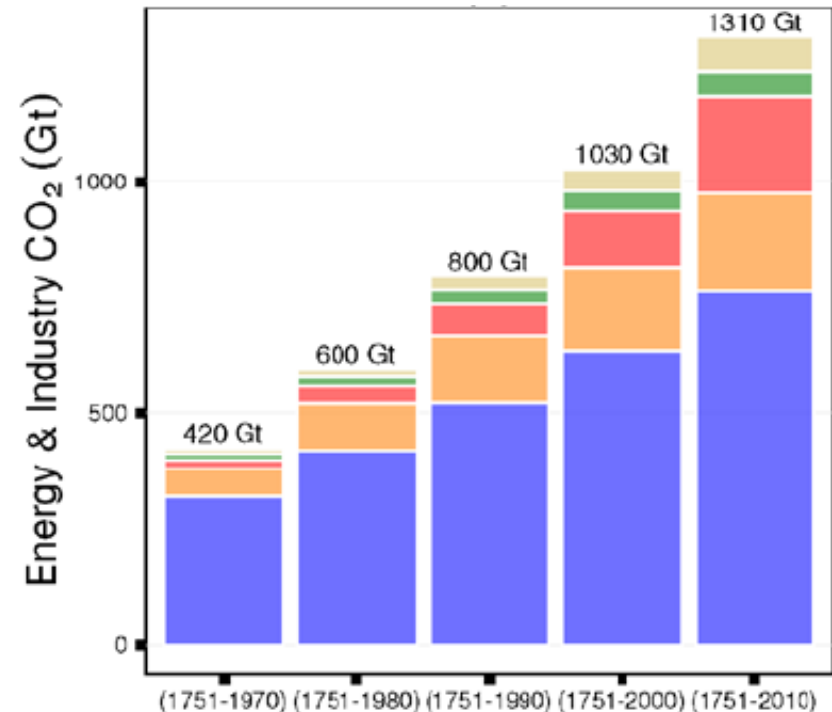
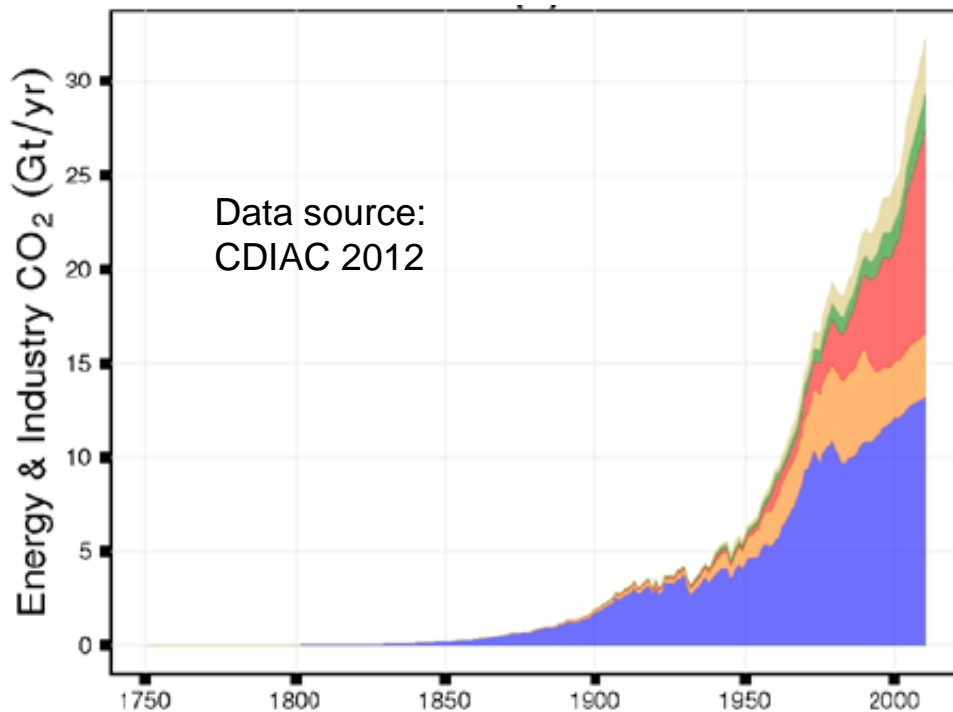
CERDI conference “Climate policies in developing  
countries”, Clermont-Ferrand, October 8, 2014



- **Developing countries and climate change mitigation in the context of the Paris Agreement**
  - The increasing irrelevance of the Annex I / Non-Annex I differentiation
  - International mitigation policies and their effectiveness
- **The CDM's success compared to other mechanisms**
  - Ensuring additionality
  - Ensuring audit quality
  - Allowing a wide range in project sizes
  - Allowing a programmatic approach
  - Taking into account variable performance of projects
  - Applying standardisation
- **From CDM to NAMAs and new mechanisms**



- Greenhouse gas emissions of many developing countries have historically been **very low**, but have started to **rise significantly** in the last two decades





# Some developing countries surpass industrialized ones

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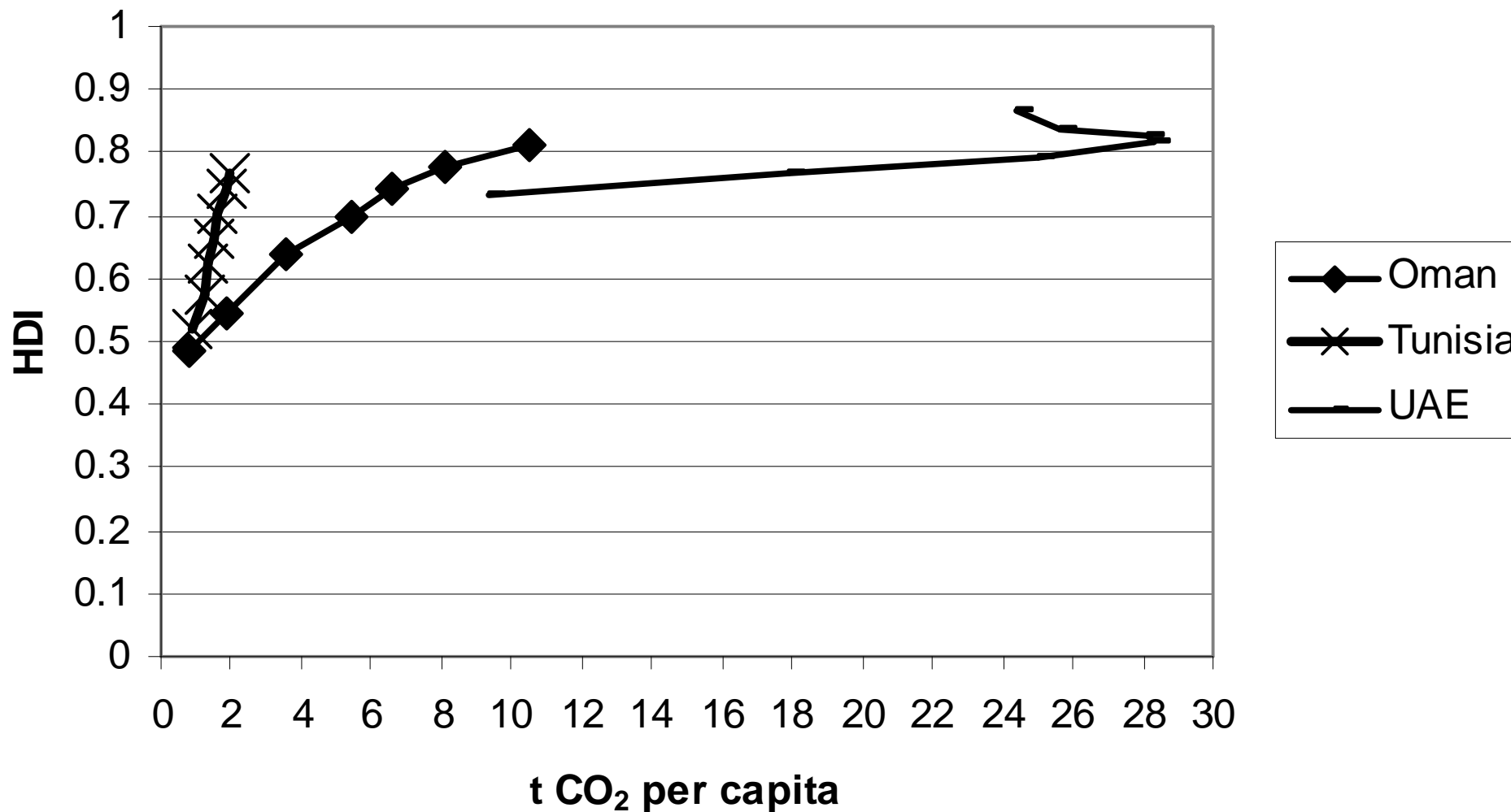
Country	UNFCCC Status	1990	2010
<b>Qatar</b>	Developing	29.7	<b>36.9</b>
<b>Kuwait</b>	Developing	13.8	<b>31.9</b>
<b>United Arab Emirates</b>	Developing	28.7	<b>20.5</b>
<b>US</b>	<i>Industrialized</i>	19.5	<b>17.3</b>
<b>Saudi Arabia</b>	Developing	9.9	<b>16.3</b>
<b>Singapore</b>	Developing	9.7	<b>12.4</b>
<b>South Korea</b>	Developing	5.4	<b>11.5</b>
<b>Russia</b>	<i>Industrialized</i>	14.7	<b>11.2</b>
<b>OECD</b>	<i>Mixed</i>	10.5	<b>10.1</b>
<b>Israel</b>	Developing	7.2	<b>8.9</b>
<b>South Africa</b>	Developing	7.2	<b>6.9</b>
<b>Ukraine</b>	Industrialized	13.3	<b>5.8</b>
<b>China</b>	Developing	2.0	<b>5.4</b>
<b>World</b>		4.0	<b>4.4</b>
<b>Chile</b>	Developing	2.4	<b>4.1</b>
<b>Mexico</b>	Developing	3.3	<b>3.9</b>
<b>Brazil</b>	Developing	1.3	<b>2.0</b>
<b>India</b>	Developing	0.7	<b>1.4</b>

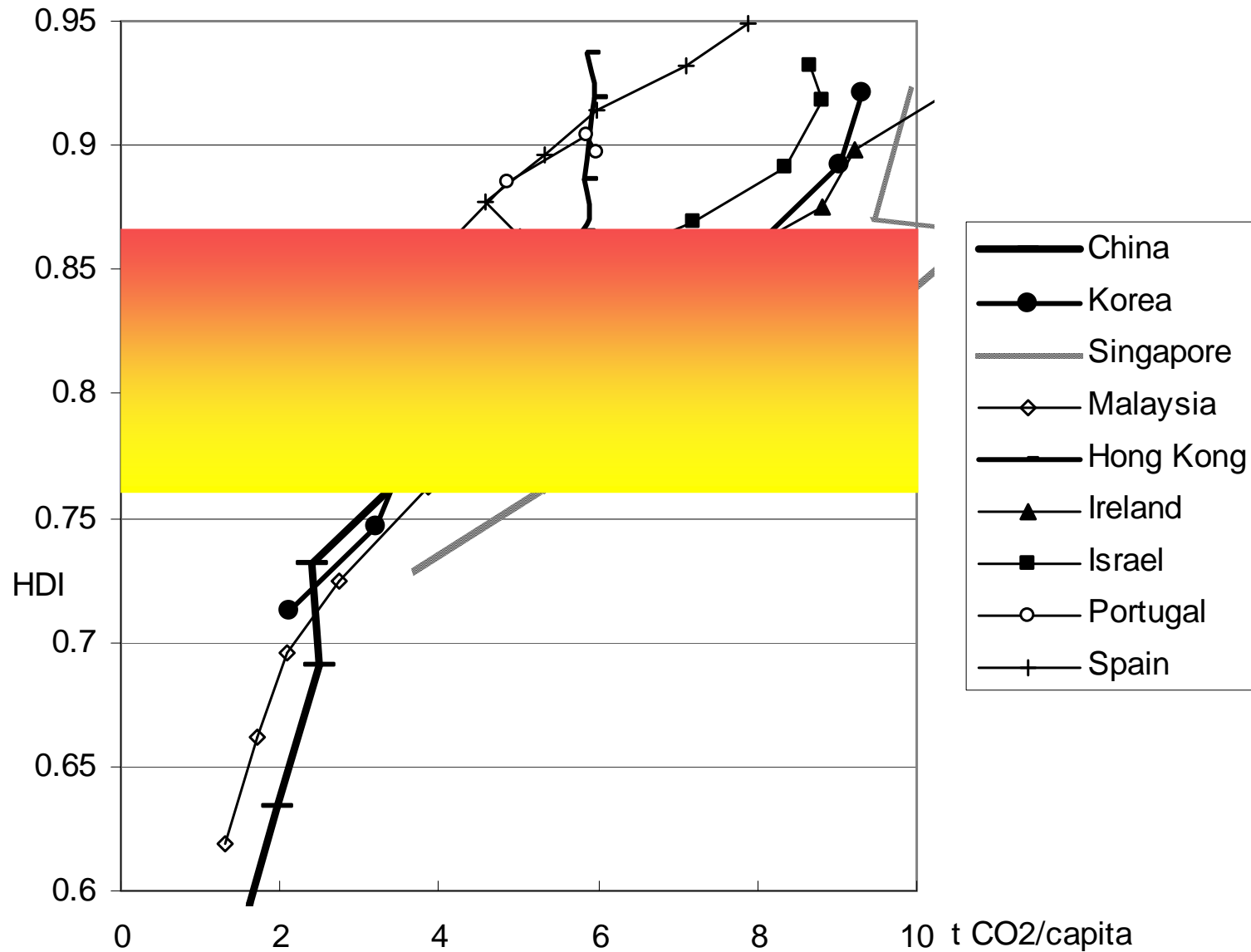


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# Emissions paths vary widely, showing mitigation opportunities

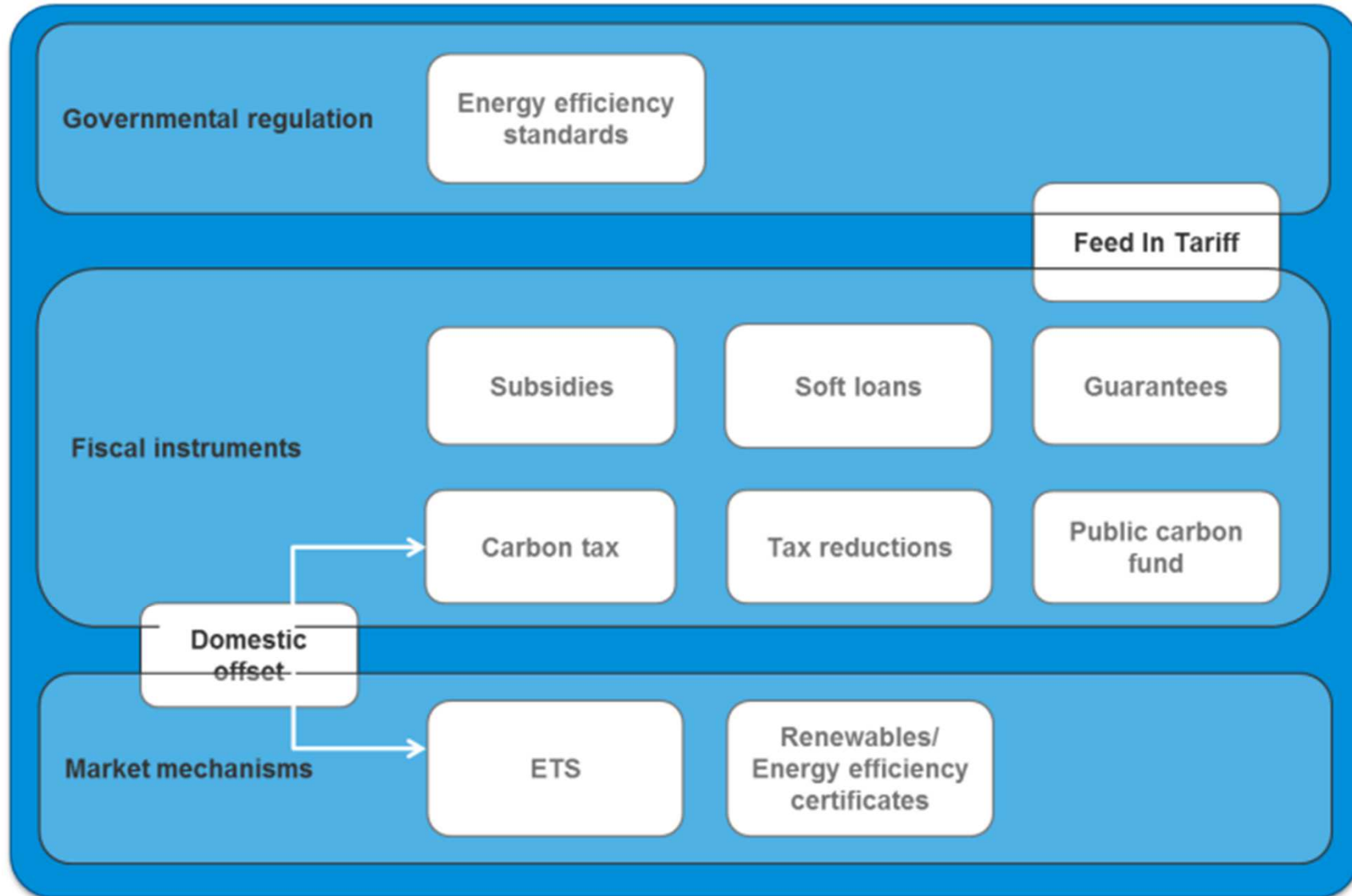
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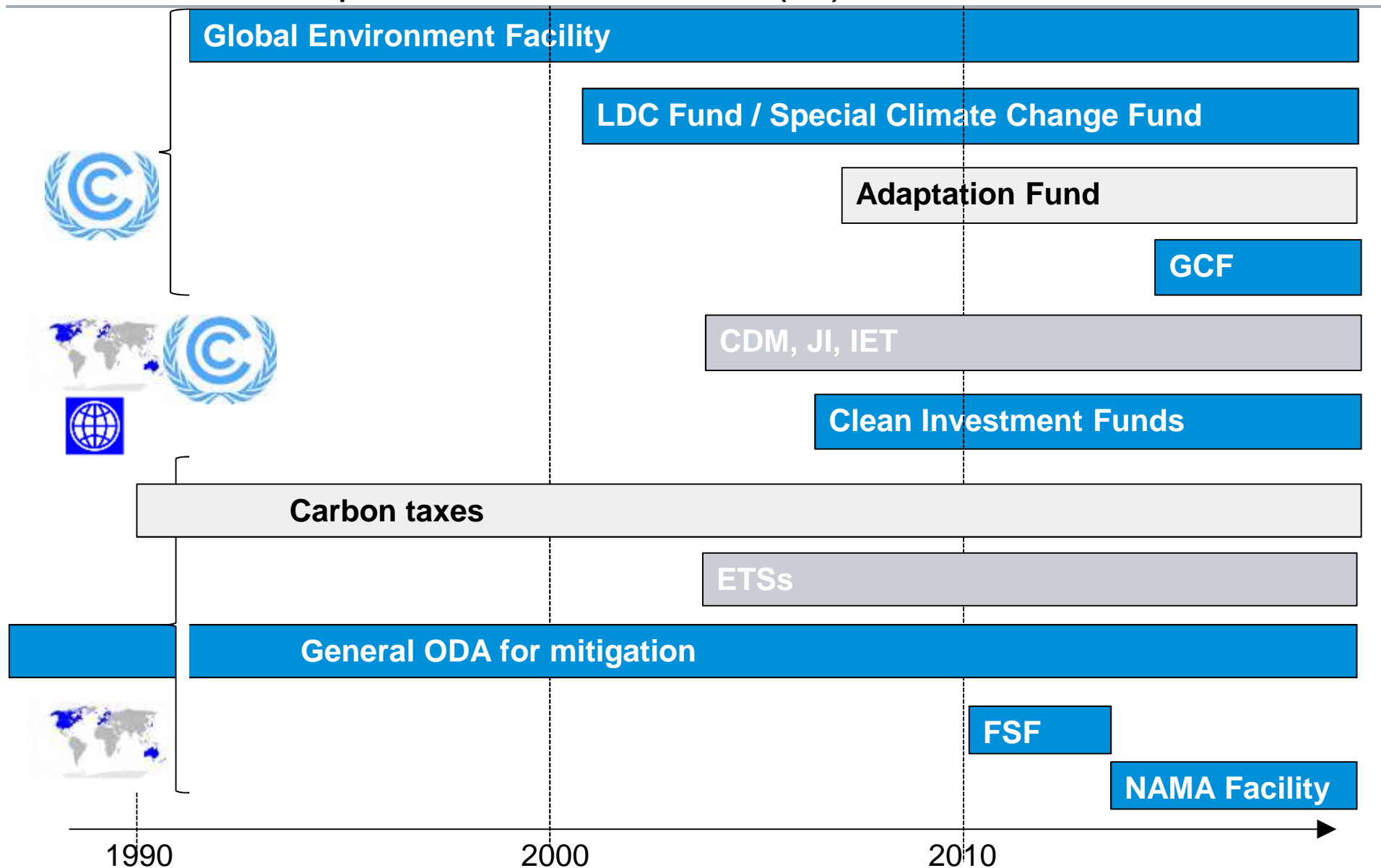
- **Development of an industrialized, middle class lifestyle with car-oriented urbanization and penetration of low energy-efficiency appliances leads to a rapid emissions take-off**
  - **China** in the last decade
  - Likely to be repeated in **India**
- **Can countries introduce policies before the take-off?**
  - **urban planning (Singapore)**
  - **appliance energy efficiency (no good example)**
  - **low-carbon energy system (Brazil)**
- **What role can new policy concepts play?**
  - **NAMAs**
  - **New Market Mechanisms**

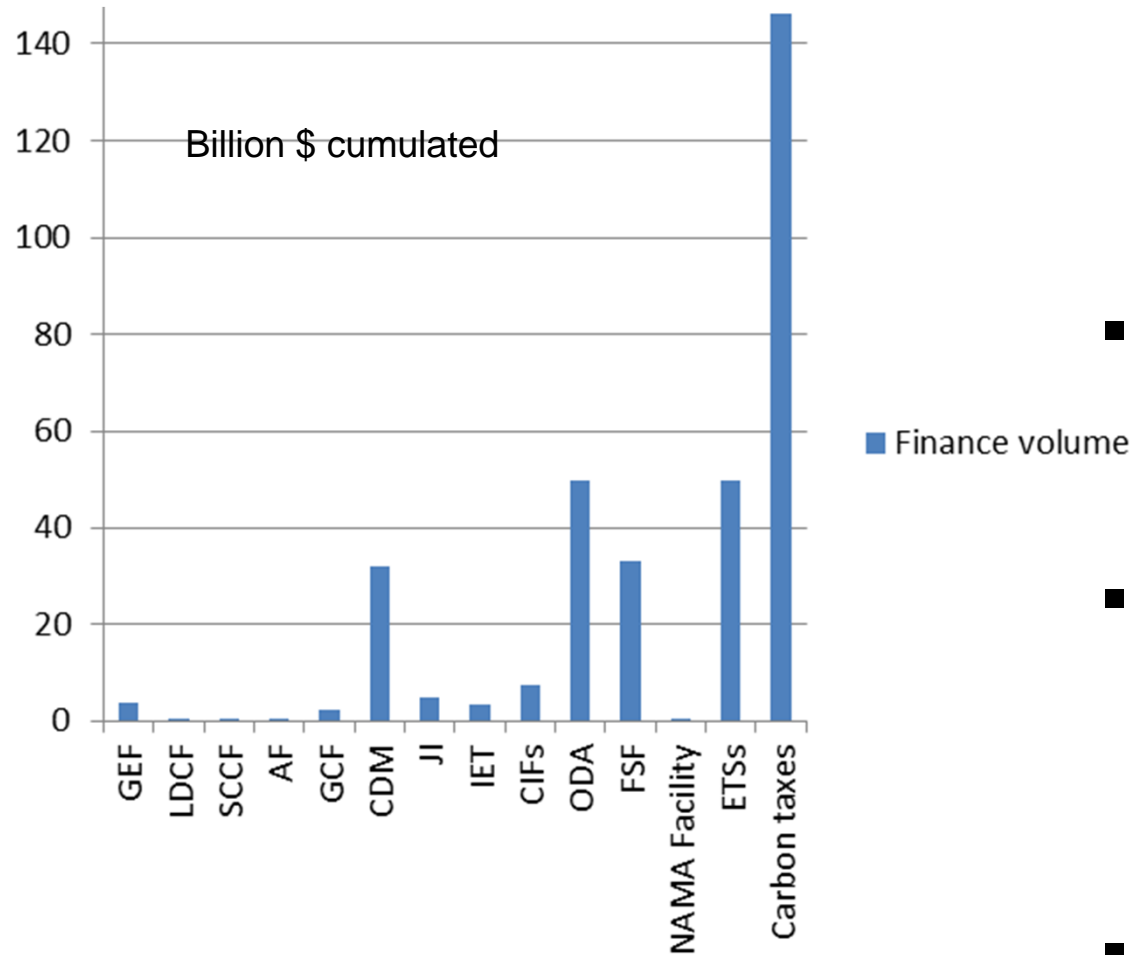






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- Public climate finance instruments are **dwarfed** by market mechanisms!
- Which **lessons** can be drawn from the mechanisms?
- Will this change due to the **possible demise of market mechanisms**?
- Can instruments be **combined**?



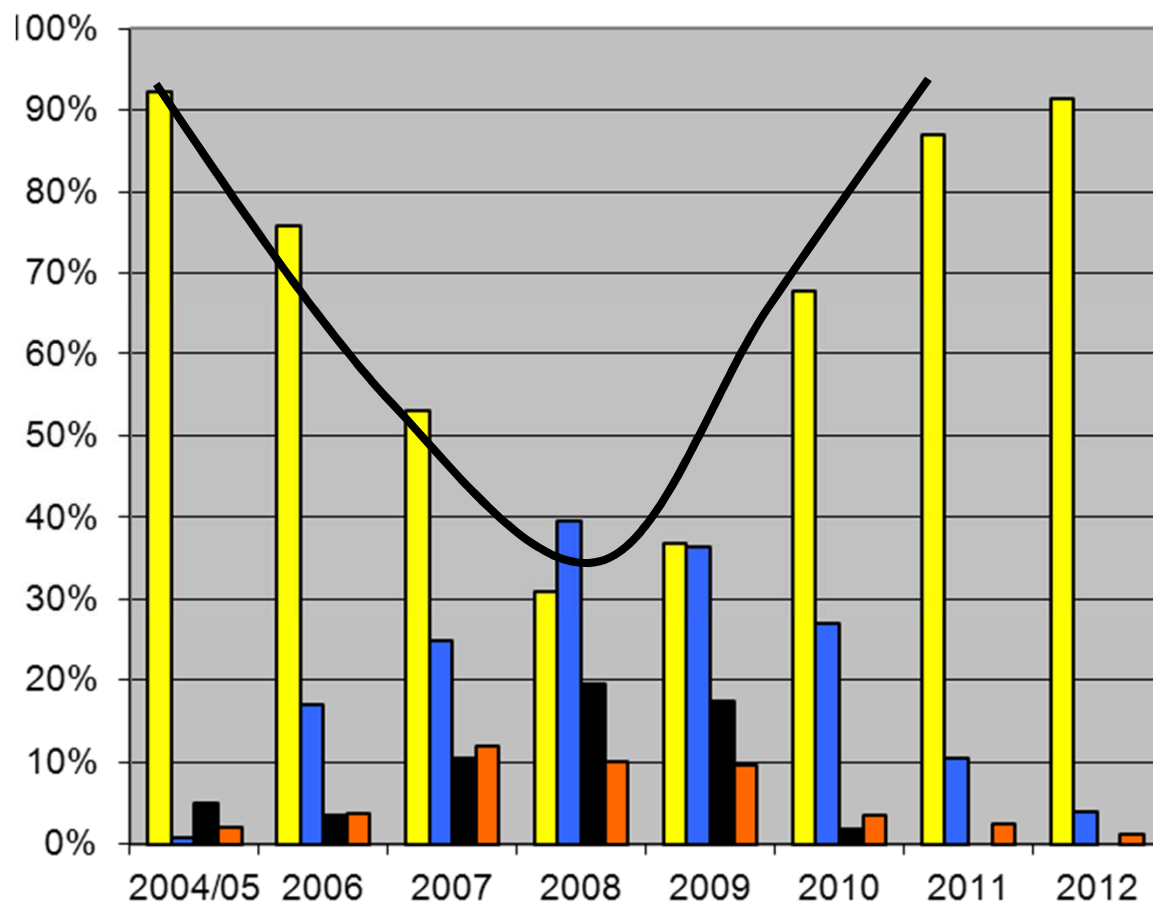
- **CDM overwhelming numerical success – 10,000 projects, billions of CERs**
  - Some sectors **sidelined: dispersed emissions, lack of private sector involvement**
    - Transport
    - Demand side energy efficiency (buildings)
- **International Emissions Trading stalled** due to mistrust of buyers in government sellers. First transactions tainted with corruption
- **JI latecomer** due to late institutional decisionmaking and **lack of trust** in governmental ERU transfers
- **Reason: Clear incentives** for the private sector, **credibility** and **limited government interference** determine market mechanism success



- CDM projects should be **less profitable** than the **most attractive alternative** or a **benchmark** or overcome **prohibitive barriers**, and not be common practice
- Original idea: Auditors **weed out business-as-usual projects**
- ~ **1/3** of projects are non-additional, share is falling
- **Arms race** between regulators and project developers, as auditors were a failure
- Credibility of CDM was **seriously shaken**
- ***Lesson: Liability of auditors and “bank-like” testing would have reduced non-additional projects***



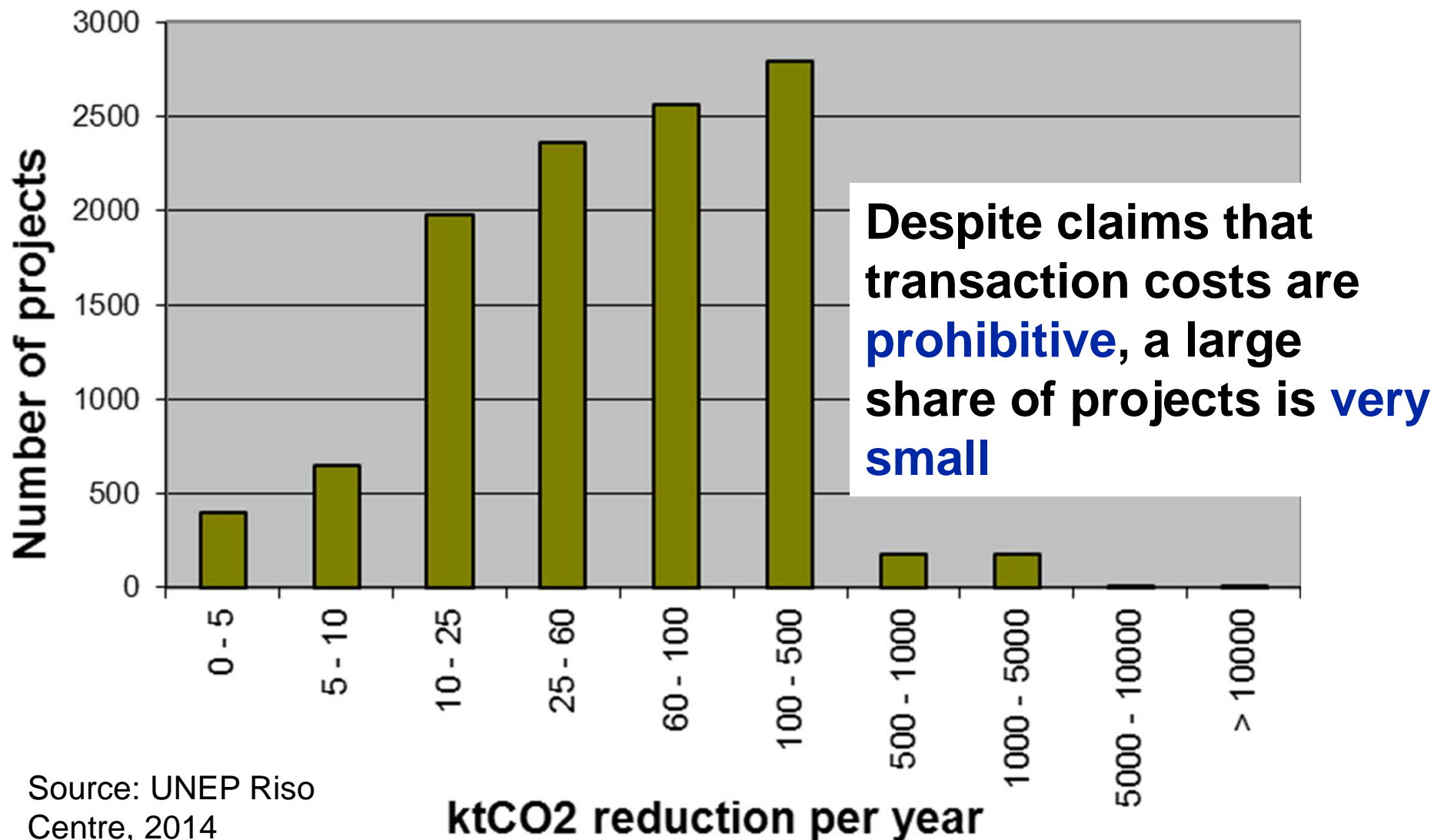
- **Original idea: Auditors do project-specific evaluation tasks and regulators focus on system-specific rules**
- **Actual outcome 2007 until 2010: Regulators engage in project-specific checks**
- **Problems**
  - Auditor performance insufficient in regulators' eyes
  - Long delays due to “pyramid of checks”
  - Instability of rule interpretation
- **Solution applied successfully from 2010: Project check by support staff, clear rules**
- ***Lesson: Separate project evaluation from rule-setting***



**Problems of third-party audit led regulators to temporarily clamp down on project proposals**

- Share of projects requesting registration registered automatically
- Share of projects requesting registration with request for review and no review
- Share of projects requesting registration that had a review
- Share of projects requesting registration that was rejected or withdrawn

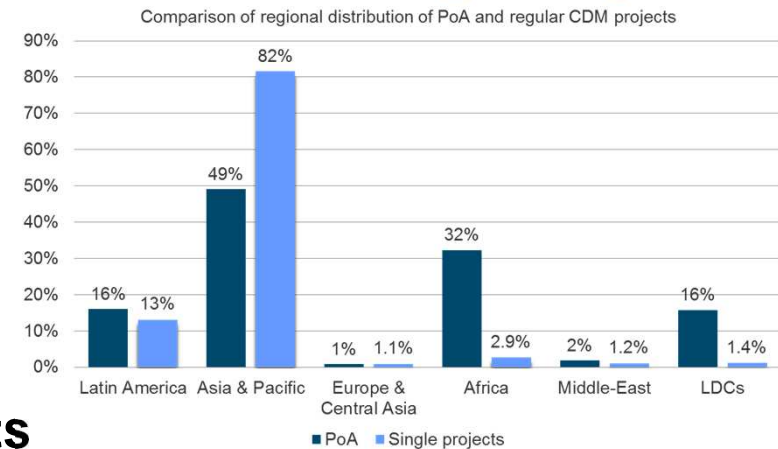
Source: UNEP Riso Centre, 2014



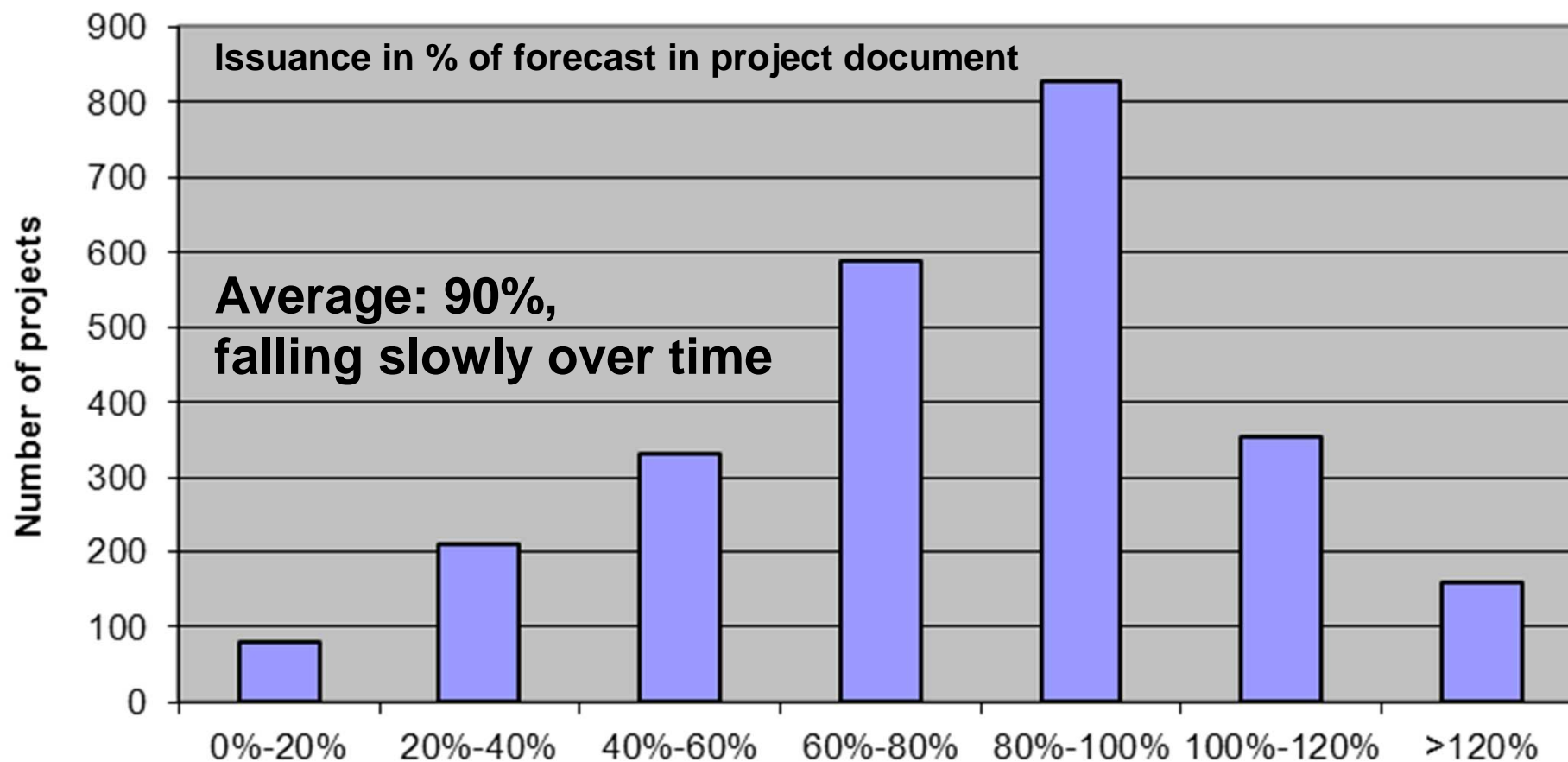
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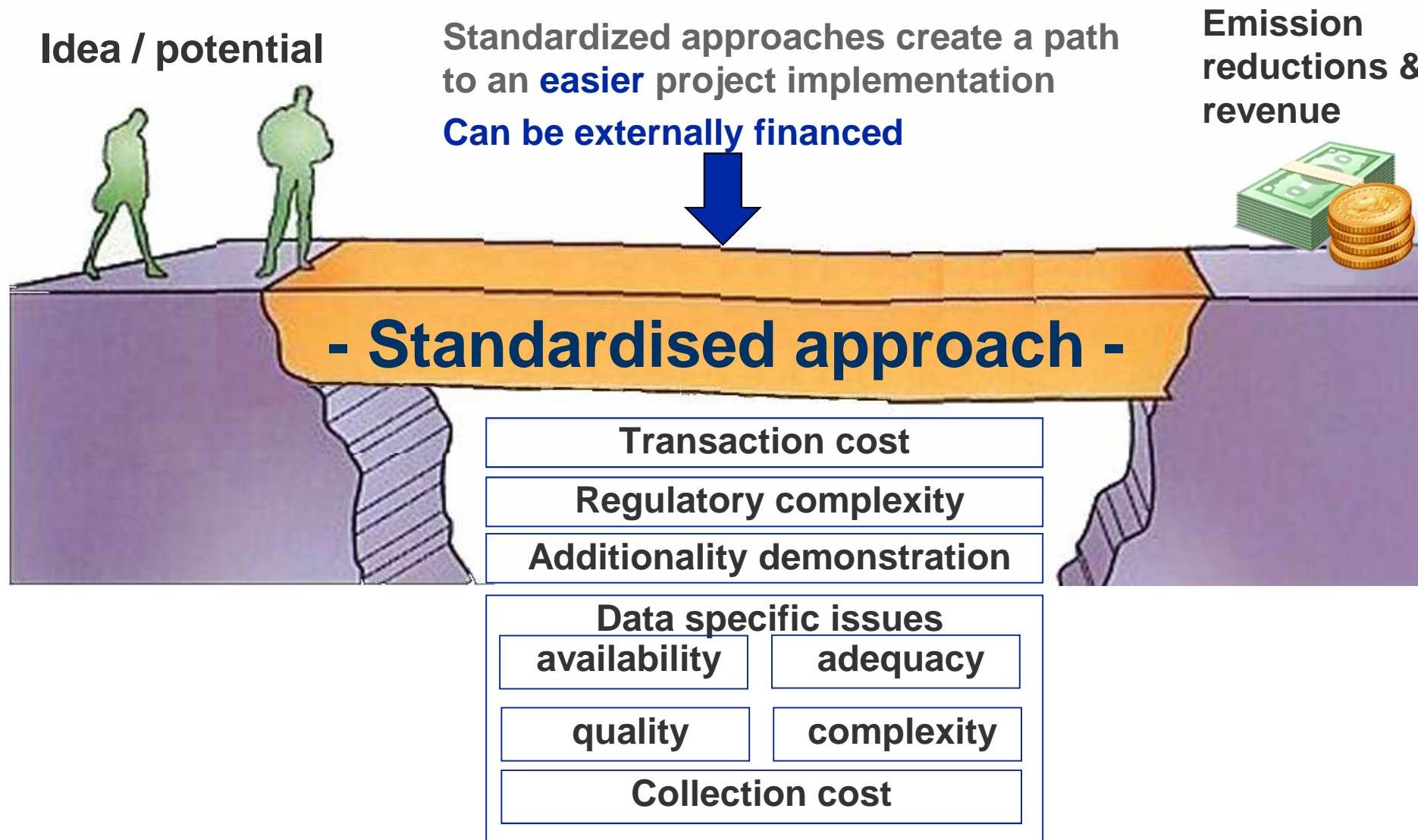
- **CDM PoAs introduced late but showing rapid penetration**
- **Multiple sites**
  - Projects can occur at different
  - local, regional or national sites
- **Two-tiered structure**
  - Two types of project participants
    - **PoA coordinator**
    - **Project developers**
  - Coordinator is key program participant (not required to undertake projects himself)
- **Unknown number and timing of projects**
  - Exact number and time of implementation of projects not known at time of submission
- ***Lesson: Allow programs***





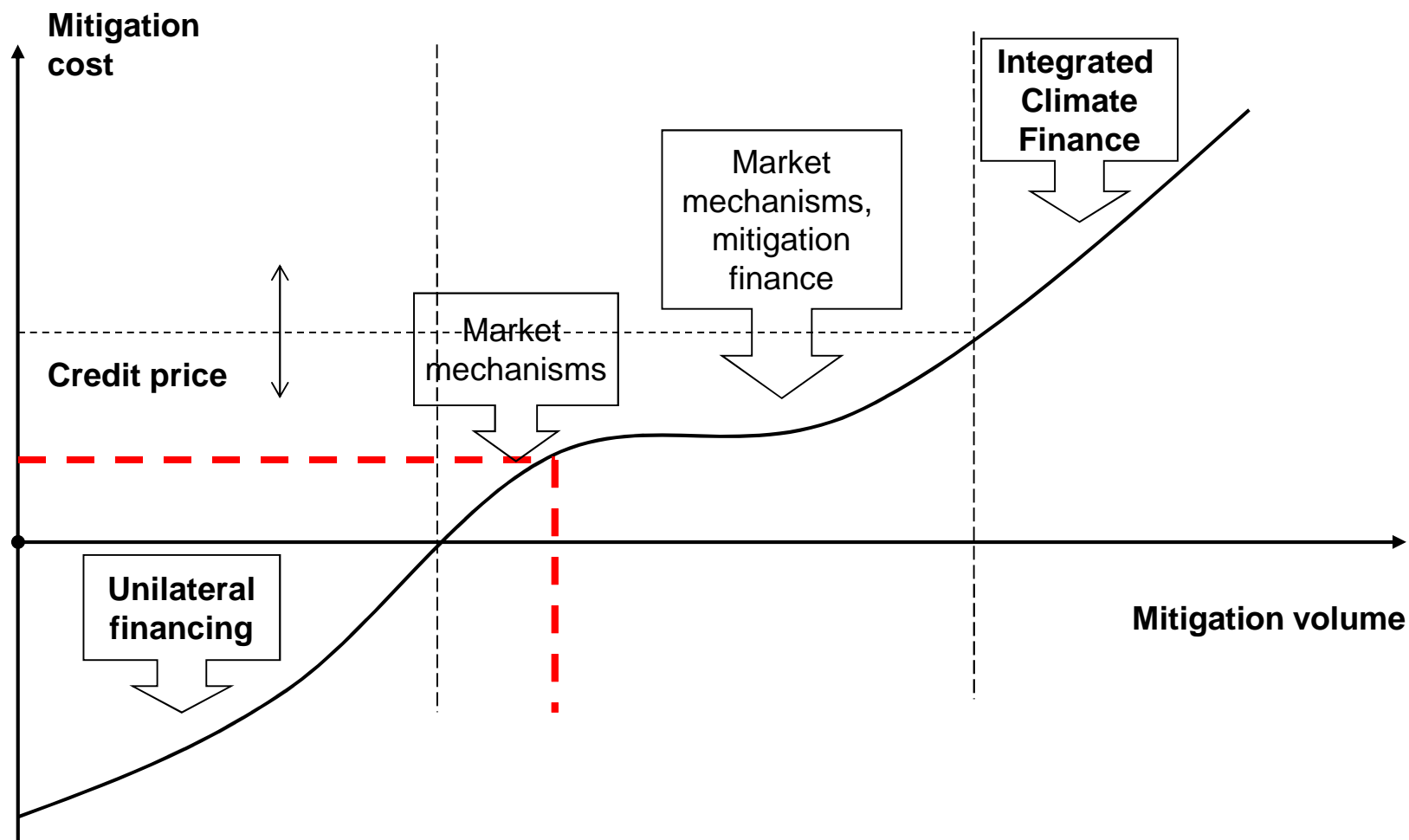


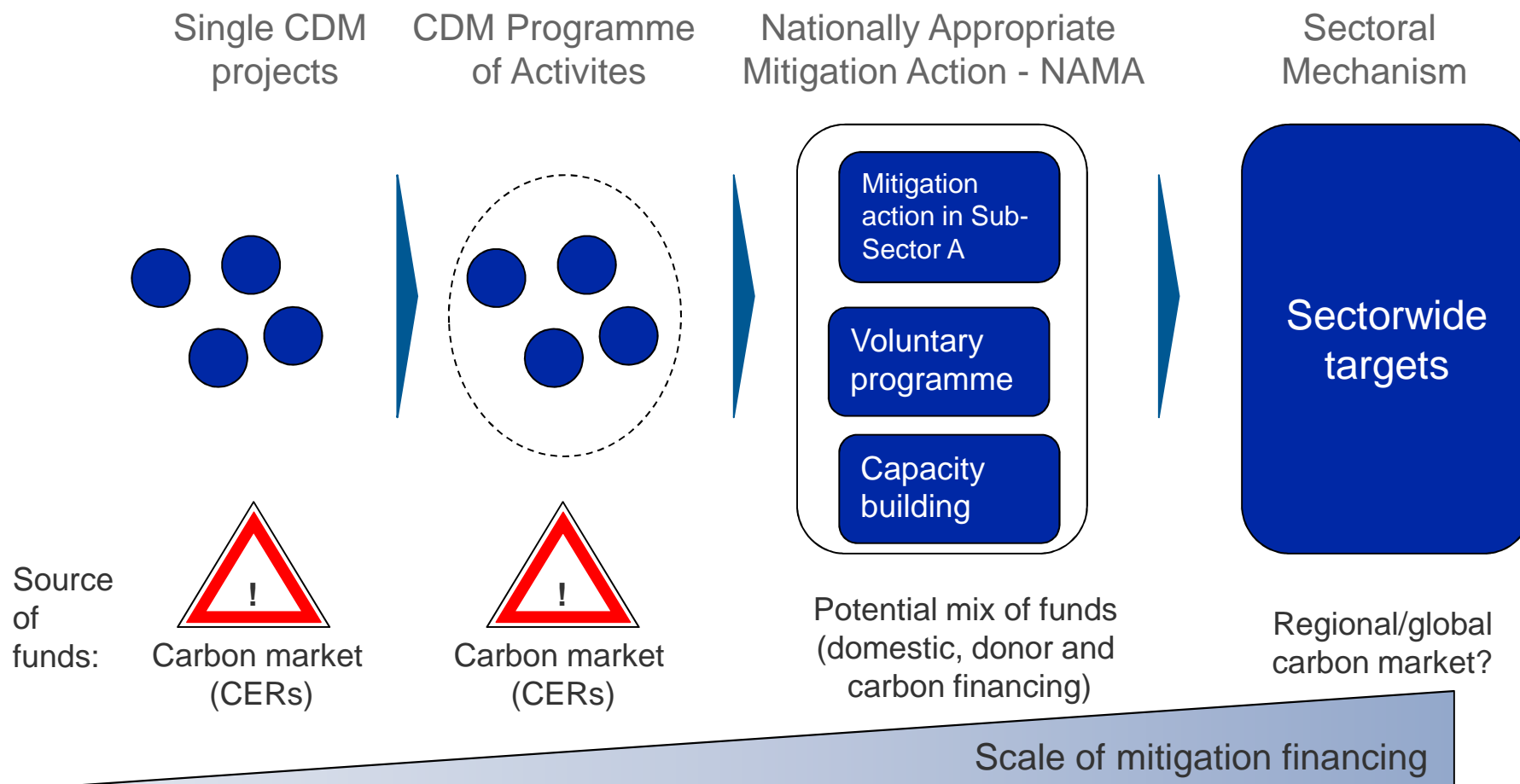
Source: UNEP Riso Centre, 2014





- Use of **default factors**, pre-defined, conservative values instead of actual data – **successful simplification** without risk for environmental integrity
- The use of a **performance standard** approach on a highly aggregated level has not worked well, but on **technology-specific levels** it can play a role
- **Positive lists** for additionality demonstration are now widely used
- **Thresholds on technology penetration rates** work for specific technologies
- ***Lesson: Select standardisation elements carefully***







- CDM was **very effective** in a **very short time**
- **Regulatory** requirements
- Assure a highly **transparent** process with **rapid regulatory learning**
  - **Development of baseline and MRV methodologies**
- Provide **monetary incentives** directly accruing to private companies without regulatory interference
- Be aware of difficulties to determine whether mitigation is “**additional**” to business-as-usual
- Require independent **audits** and be prepared for **regulatory clampdown** if audits are not credible
- **Characteristics of mitigation**
- Transaction costs **came down sufficiently** to allow small projects
- **Programmatic** approach benefits poorest countries
- Mitigation performance **varies widely** across project types