Equitable Financing & Reducing Emissions from International Transport

Technically sound and **politically acceptable levies on emissions** from international aviation and **maritime transport**

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Andre Stochniol IMERS
Panelists:
Henry Derwent IETA
Jake Schmidt NRDC, USA

Two Problems ... in this order

1. **Current mechanisms to finance climate change adaptation in developing countries are inadequate**, both in scale and design
   - The financing gap is huge, circa 100:1
     - Tens of $billions are needed annually
     - Available total: $0.4bn

   Yet the poorest countries are most vulnerable, will be hit hardest by climate change and did not create the problem

Financing gap

$0.4bn $50bn

2. **International shipping CO2 emissions are outside of the Kyoto Protocol**
   - Significant and rapidly growing
   - Double aviation emissions
   - Attempts to address them have failed
   - Regulation needs to comply with the differentiated climate regime (CBDR)
   - Global and complex

A Core Issue

How to attribute emissions of a ship that is:

- Swiss owned,
- Flying Liberia flag,
- Chartered by Danish company,
- Leaving Saudi Arabia, with
- Cargo for NY, and Shanghai,
- Via international waters.

... **One Solution** (supra-national)

- Int'nl shipping CO_2 emissions would form one emission bubble:
  - Price on emissions would be established, and apply to all ships
  - Levy is preferred (**consistent with the AWGLCA negotiating** §'s 36, **173d**)

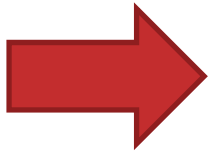
- Ships would be liable to pay a levy on fuel for carrying goods to:
  - Rich countries only: @100% (rich =~ Annex I countries)
  - Poor countries only: 0%
  - Both to rich & poor: 60%, on average
    - Based on % of goods carried to rich countries annually by the ship/co.
    - Enforcement in rich ports: pay up 100% or prove you should pay less

- Level of levy is determined by the U.S./international carbon price (or by an emission **cap** and the market carbon price → cap-and-levy)
  - **Levy set by market** rather than a political body
  - Paid direct to the central ship account, bypassing national coffers!
  - **100% of revenue generated goes to climate change**

Outcome

- Worldwide, the share of goods transported to Annex I is circa **60%**
  - Day 1 of scheme: 60% of maritime emissions covered, with an ambitious emission cap e.g. **20% emission reductions** for Annex I (by 2020)

- **Easily Affordable:**
  - Marginal cost: just +0.1% on import prices to Annex I (**$1 per $1,000**)
  - No impact on imports to non-Annex I



- **Significant Impact:**

FUNDS pa*	2013
Mitigation	4
Adaptation	**4**
Technology	2

* In $billions per annum

TOTAL: circa $10bn

For levy = $15/tCO2

Approach Benefits

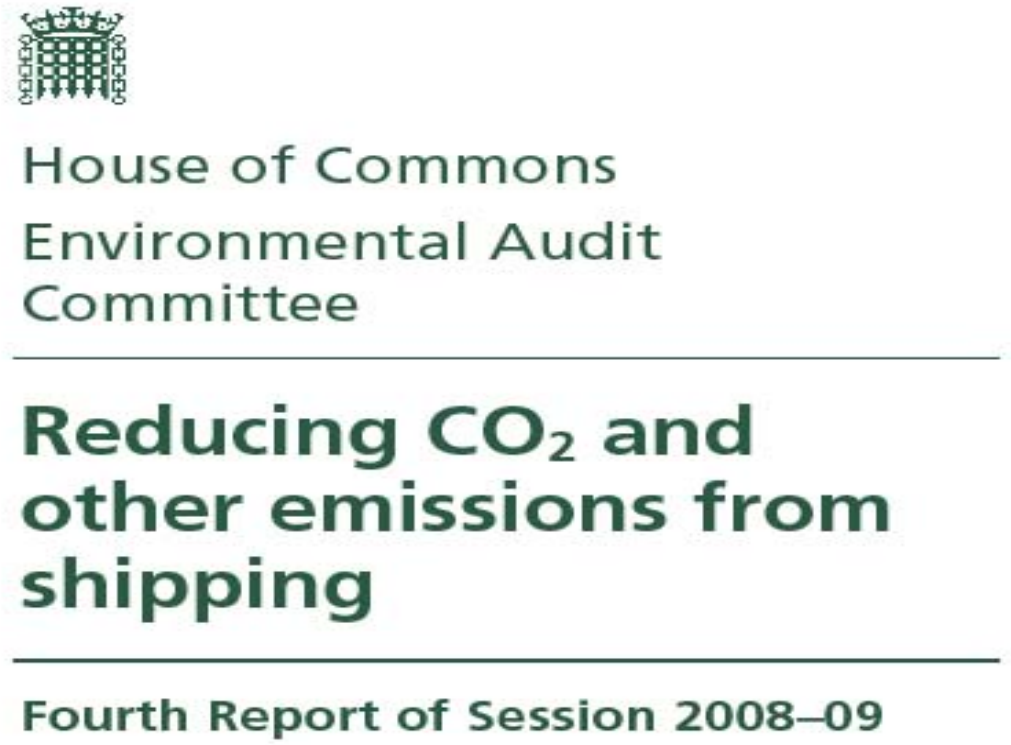
- Focusing on **what's politically acceptable** (rather than what's better: a uniform cap-and-trade or a uniform levy, which are equivalent anyway)
  - If a uniform deal will be possible – as part of the package – the easier;
- A central, supra-national differentiated approach would:
  - Resolve the conundrum of reconciling the need for Global rules (as per the IMO) with Differentiated responsibilities (as per the UNFCCC)
- Its implementation would:
  - Provide an effective centralized system rather than patchwork of multiple variants for different flag states, starting from 2013
  - Be future-proof, by being automatically compatible with any CC regime as it allows taking emission deviation commitments, and similar
- Importantly, it would create a **new governance** to effectively address emissions that are inherently beyond national jurisdictions
  - Legal under international laws and rules (UNCLOS, WTO, GATT; would use IOPC Funds as the precedent for direct collection of funds)

How will the scheme reduce emissions?

- It will bring additional incentives and certainty to invest in efficient engines, ships, and practices
- It will collect data on ship efficiency, thereby giving charterers a mechanism to choose more efficient ships
- Financing provided for capacity building of developing countries will increase their openness to globally applicable efficiency measures
- See financing provided for R&D will bring forward adoption of hydrogen engines by a decade or so
- Supplemental emission reductions will be achieved through carbon markets, and forestry (REDD+)

Integrity of any scheme with national carbon budgets may be [is] important

- UK Parliamentary Report Released Today (HC 528)
  - A Key Point: “Emissions from shipping **must be taken into account in the UK’s carbon budget**”



Integrity of the Scheme
Right to Left approach …

- **First a global instrument … then accounting, where needed**
- **Preferred** & alternative options:
  - **Country shares accounted in the national totals** (carbon budgets)
    - Calculated from the world total
    - Initially through a simple measure such as share of imports
      - e.g. for 1GtCO2 emissions, USA's share would be 162 MtCO2, UK's share: 48 MtCO2
      - A better measure could be developed with time; GDP's share is less appropriate
  - Completely off (above) national totals
    - Global accountability?
    - Issue → IMO and ICAO are not parties to the UNFCCC
      - If they don't deliver the cap who is in non-compliance → the world? (i.e. all parties ?)

Country	Share of import %	Share of GDP %
USA	**16.2**	27.4
Japan	**4.8**	9.0
Germany	**7.3**	6.0
China	**6.2**	5.5
UK	**4.8**	4.9
India	**1.4**	1.9
Greece	**0.5**	0.5
Panama	**0.04**	0.04

* Source: IMF & World Bank, 2007

Sealing the deal in the UNFCCC & IMO/ICAO
Avoiding unnecessary conventions

- Market-based/financing part → **UNFCCC**
  - Should be done within the Copenhagen (part of the package)
  - Arguments similar to the Norwegian proposal for auctioning of AAU under convention

- Technical, operational, infrastructure → IMO for shipping (ICAO for aviation)

- Such separation would allow a high level of ratification and thereby compliance, and speed to results

Executive Summary

- A technically sound and **politically** acceptable levy on emissions from international shipping, which differentiates responsibilities between developed and developing countries*
  - * or [recognizes national circumstances]

- Applied worldwide, collected centrally – bypassing national coffers – raising circa $10bn annually for climate action

"It is one of the least controversial and most effective ways to generate significant additional climate change funding"

Conclusion

- Addressing the financing gap & CO2 emissions is an opportunity:
  - A differentiated levy is equitable, clear, predictable and effective
    - It's flexible to allow "national circumstances" (U.S. indirect levy collection, if needed)
  - By being collected centrally provides 100% payout to climate action
  - In contrast to cap-and-trade, it can be rapidly and cheaply implemented
    - Neither large bureaucracy nor complex reporting is required
  - It is underpinned by existing law and trade rules

- From our experience, it still requires:
  - Proactive approach and leadership *(including lead by a group of countries)*

- Parties should pull/push for a global scheme for shipping emissions here in Bonn
  - It's a perfect opportunity to solve two problems simultaneously *(i.e. "kill 2 birds with 1 stone")*

Details: www.imers.org

Discussion and Q&A

- Equity
- Integrity
- Next Steps, in Bonn & beyond

Back-up slides

Business Benefits
Three Examples
Use of Funds
Comparison with cap-and-trade
Equity Dimension

Benefits to Ship Owners, Charterers, and Investors

- Hassle free solution for CO2 emissions with minimal administration costs
  - No allowances to manage, no individual cap to comply with, services provided, no set-up costs, compliance easily verifiable
- No impact on international competitiveness (level playing field)
  - **Equally applicable** to all vessels **irrespective of flag** they fly **and nationality** of the ship-owner

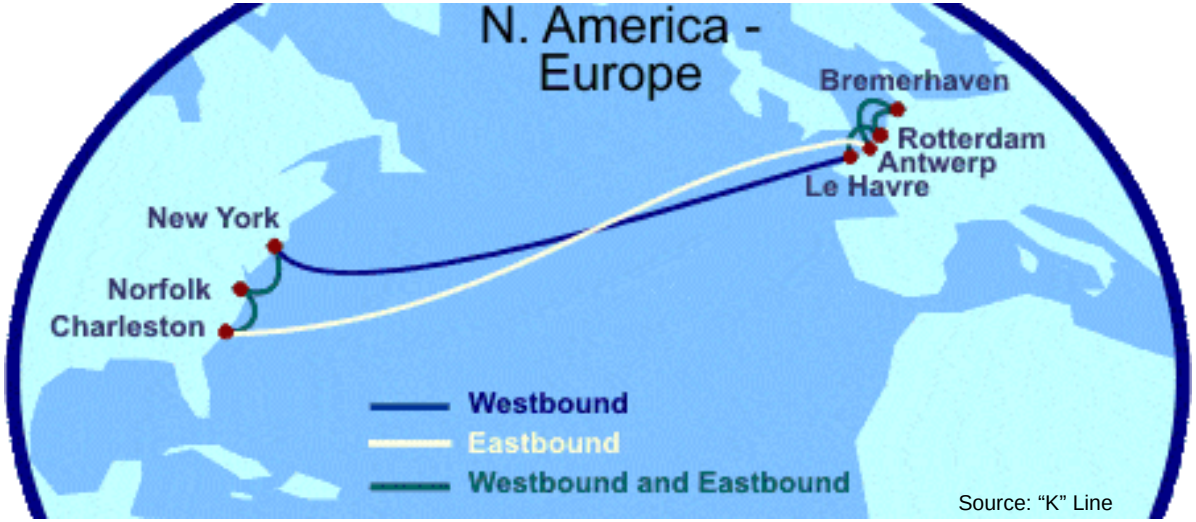
- Stimulation of innovation, investments in R&D, and in infrastructure
- **Increased cash flow** (EBIDTA) as a result of reduced delays, improved operations and reduced fuel (especially to/from developing countries)

- Reduced risk of multiple regulations
- **Benefits of better image** (clean transport, social responsibility)
- Increased demand (with increased trade and development)

Climate change action makes good business sense

Three Examples

Vessel	Route/Voyage	**Cargo Destination**	**Levy %**
1. Tanker	Persian Gulf → Rotterdam	Annex I (A1)	100%
		» on the entire fuel, incl. the ballast leg	
2. Bulk	Australia → China	non A1	0%*
	» * Current climate change regime; can be set by an emission deviation		
3. Container	N. America ←→ Europe	A1	100%

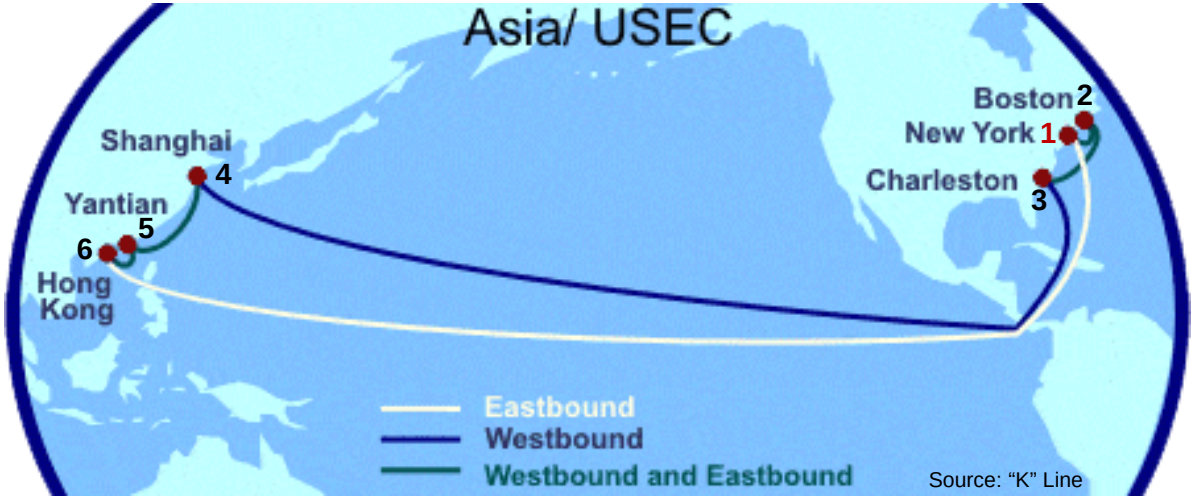


Equally applicable to all vessels **irrespective of flag** they fly **and nationality** of the ship-owner

Multiple Destinations

(1 statistical ratio needed to qualify for a lower payment)

Vessel	Route/Voyage	**Cargo Destination**	**Levy %**
Container	Asia – US (East Coast)	A1 & non-A1	variable



» Based on a ratio of delivered containers to A1
(% of full containers unloaded/ transported to A1 countries; the final destination counts)

EXAMPLE Number of full containers (TEUs) unloaded/transported to: *(illustrative)*

Ports	A1	non-A1 (incl. trans-shipments)	TOTAL
Asia	200	2,000	2,200
US	2,800	-	2,800
Total	3,000	2,000	5,000

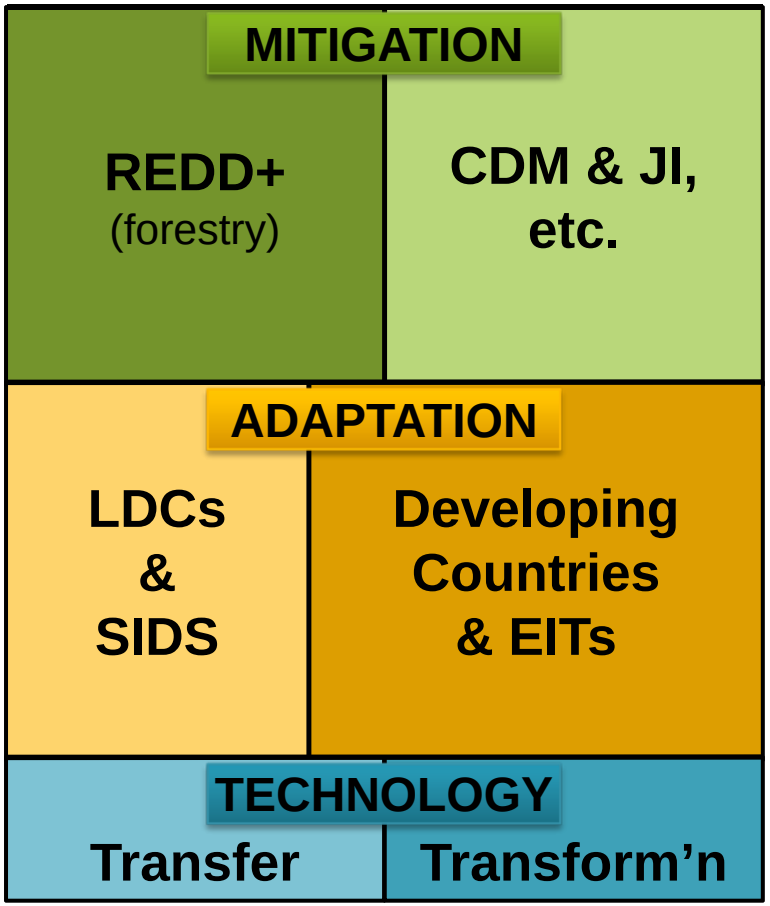
A1 cargo ratio: **60%** (i.e. emission payment = 0.6 x fuel used x levy level)

Use of Funds
FAQ 6 & 7

6. What would the funds be used for? Who would benefit most?

   – Mitigation, Adaptation & Technology →
     - Note: current preference is to potentially use the entire mitigation financing for REDD+

   – LDCs & SIDS would benefit most
     - Insurance could also be financed

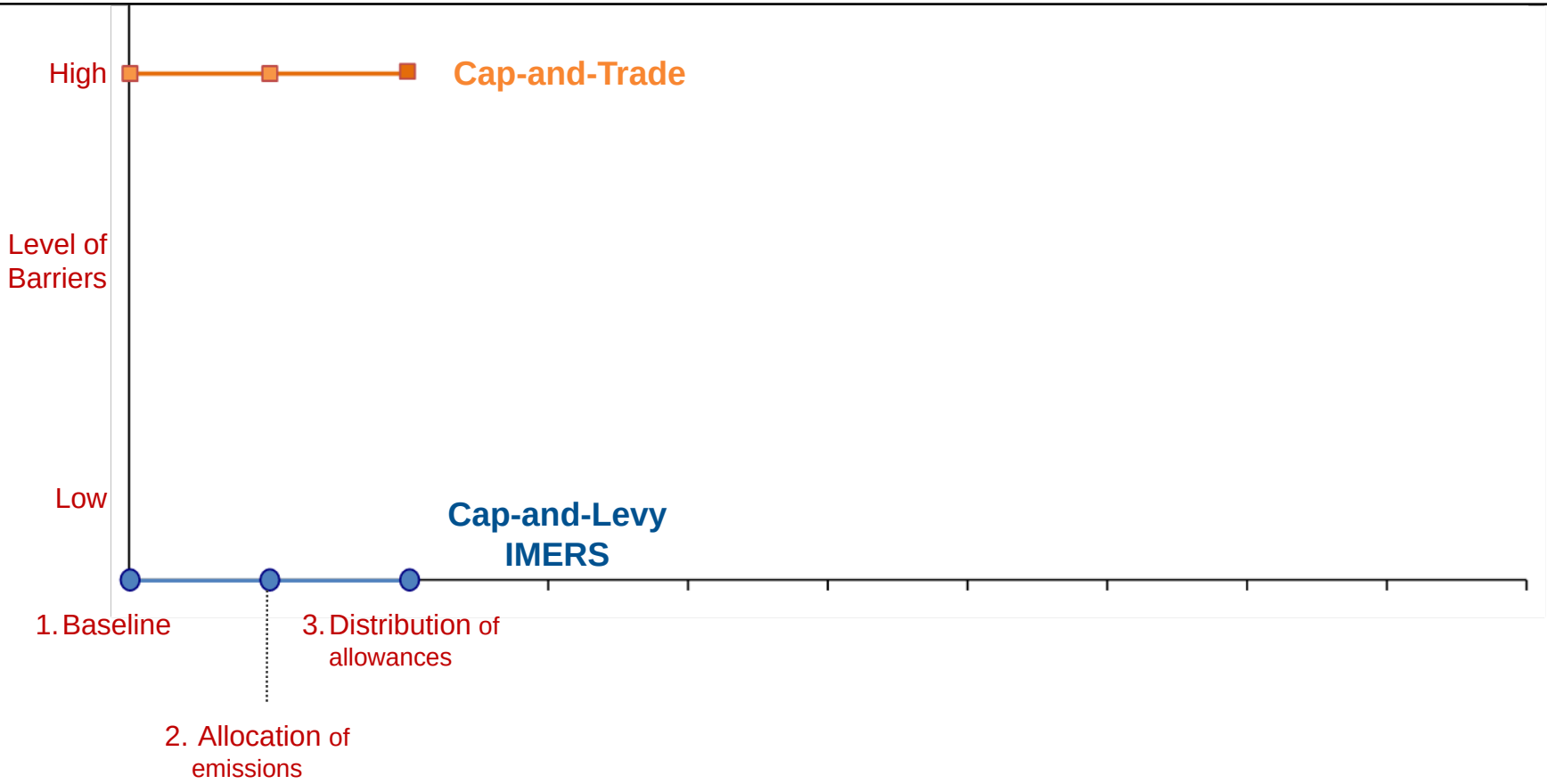


7. Where does the money for adaptation come from?
   – Aggregated demand provides access to cheaper emission credits
   – Generated gains are utilized to address adaptation issues

How does IMERS compare with a cap-and-trade scheme?

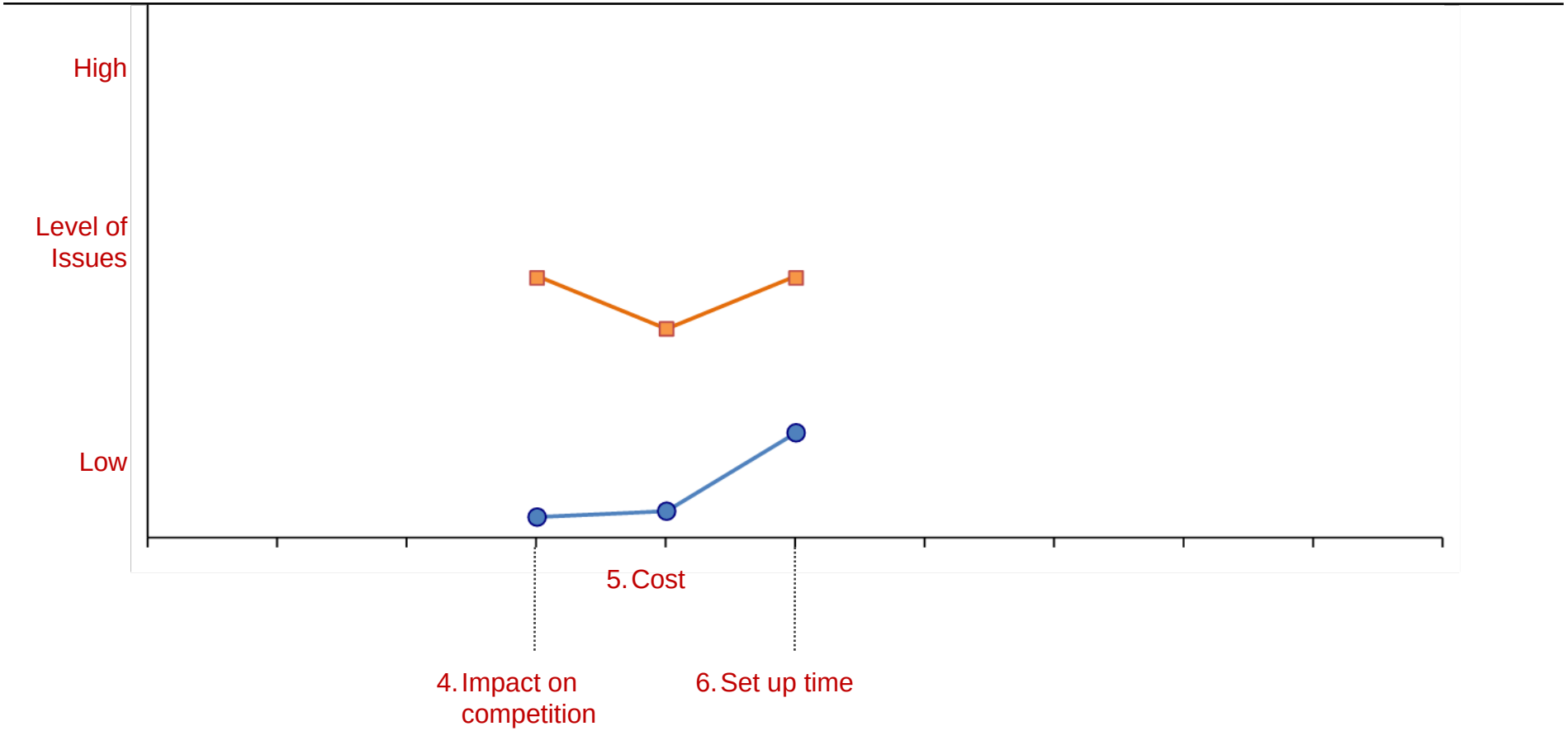
Barriers 1 – 3

Eliminates the three central barriers 1 – 3



How does IMERS compare with a cap-and-trade scheme?
Issues 4 – 6

Reduces the negative impact of key issues
4 – 6



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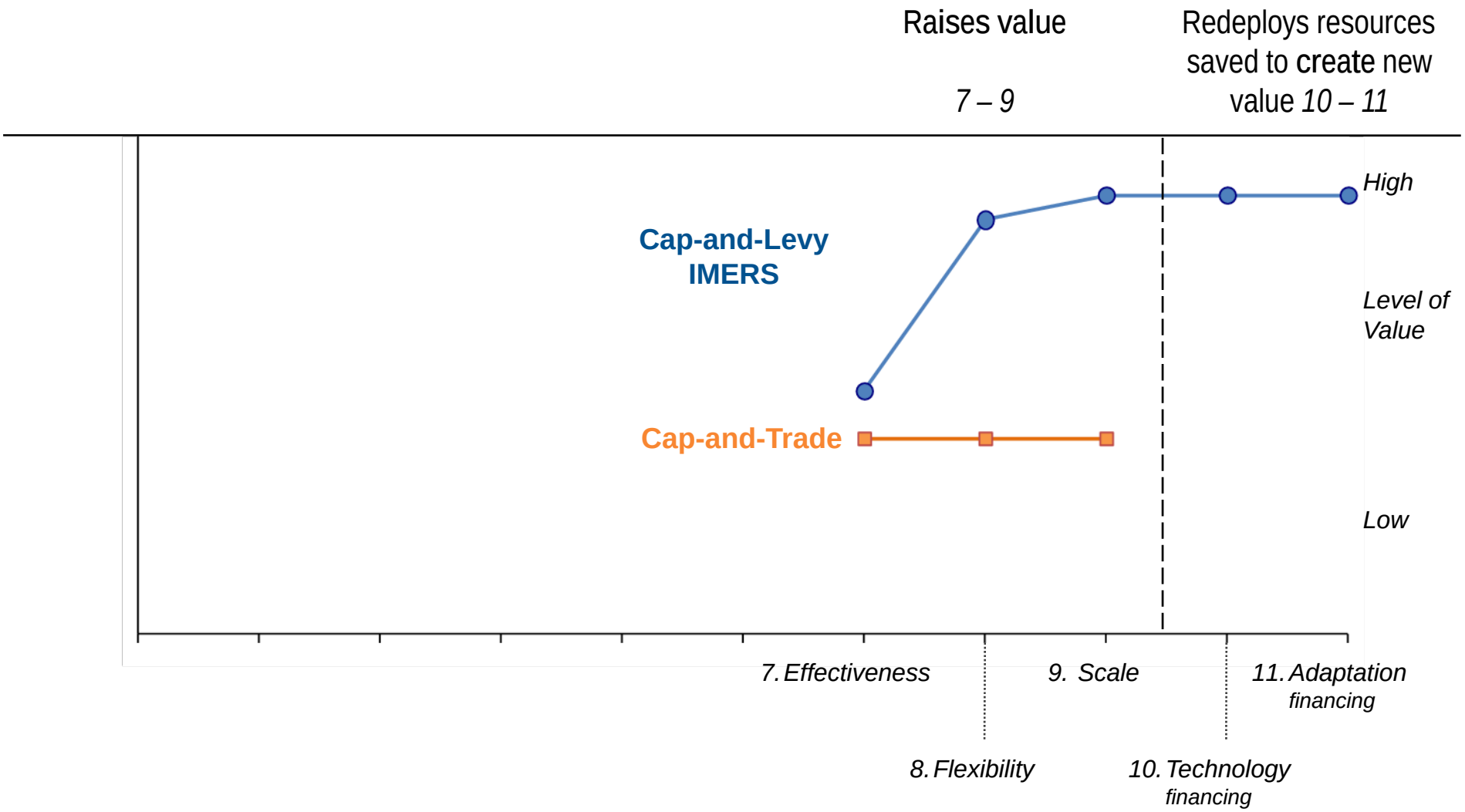
Value 7 – 11



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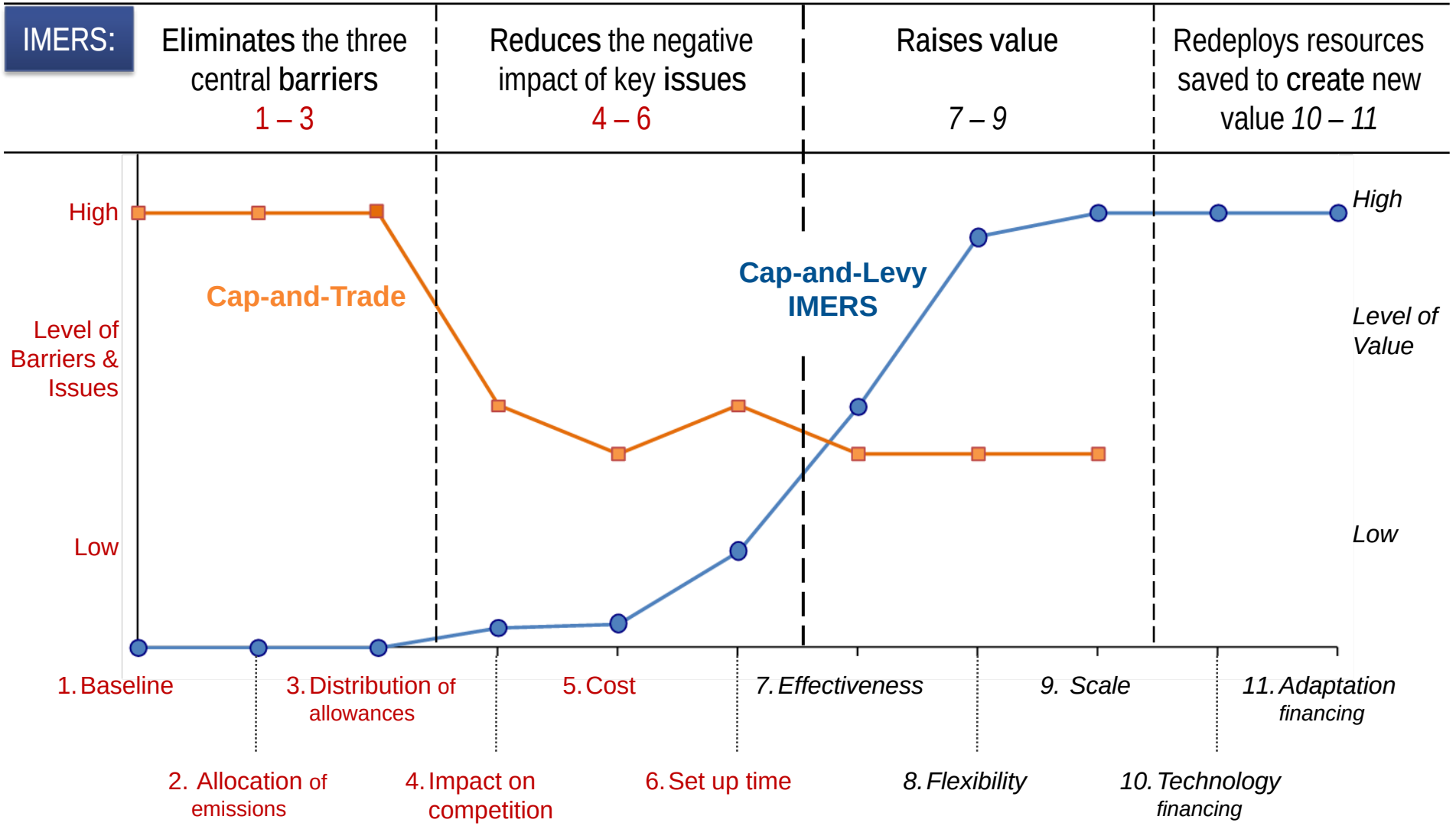
Comparison Summary



Equity Dimension

World's distribution of population and import freight costs