
Some considerations for an AMC in the climate context



Outline

- Advance Market Commitments and general pull-mechanisms ('AMC+') in climate finance.
 - Lessons from the vaccine AMC for the climate context.
 - An analogy, and its limitations.
-

AMC or 'AMC+'...?

Pull-mechanisms or 'AMC+'

- A mechanism that provides a value enhancement to overcome uncertainty over whether investment costs can be recouped.

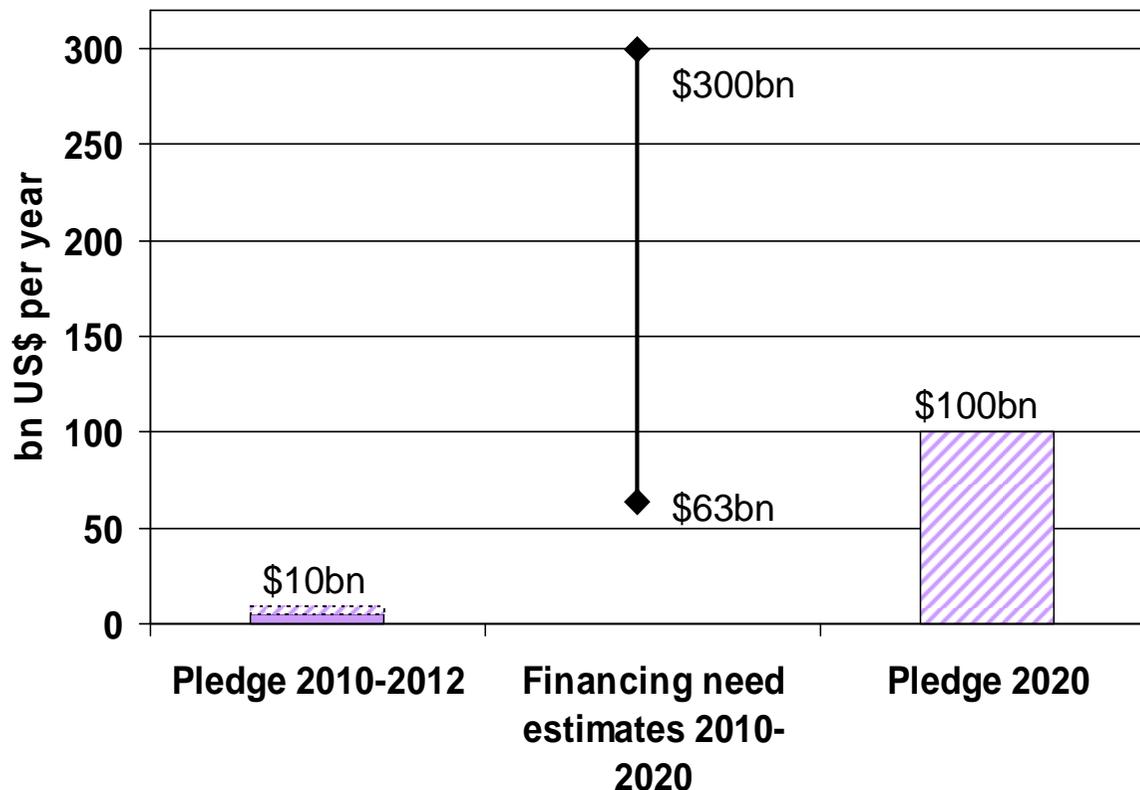
AMC

- A pull mechanism that seeks to create a sustainable market by subsidizing demand in exchange for capacity creation.

	<i>Requires dedicated capacity</i>	<i>No dedicated capacity</i>
<i>Demand subsidy</i>	Original AMC	Feed-in tariff
<i>No demand subsidy</i>	Renewable energy standard	X-prize

AMC+ climate applications must seek to leverage private funds.

Climate funding commitments vs. need estimates



Source: WDR 2010, Copenhagen Accord.

Current climate funding commitments:

- Funds are scarce;
- Many rival uses, from forests to adaptation;
- Not clear how much funding is new;
- Not clear how reliable.

Therefore:

Where possible, invest public funds to reach tipping point where markets become sustainable.

How to learn from the vaccine AMC

- A key lesson of the vaccine AMC is that the specific product, market, industry, and policy context matter!
 - Do not try to just transplant the concept.
 - Rather, define the project, then tailor a financing instrument.
-

The original vaccine AMC is complex...

The principal goal: create a viable market that sustainably serves poor countries.

- **Supply commitments** sought for 200m doses annually for 10 years
 - With **tranching**
 - **AMC subsidy entitlement** (proportional to supply commitment)
 - **Rate of subsidy**
 - **Demand guarantee**
 - **Tail price ceiling**
-

... this was made necessary by diverse challenges in the market environment

Problematic market features:

- Indivisibilities in capital investment
- Demand risk and asymmetric information on demand
- Asymmetric information on cost
- Strong market power:
 - Only two players in the short run, one assumed to have higher unit cost
 - Possibility of entry

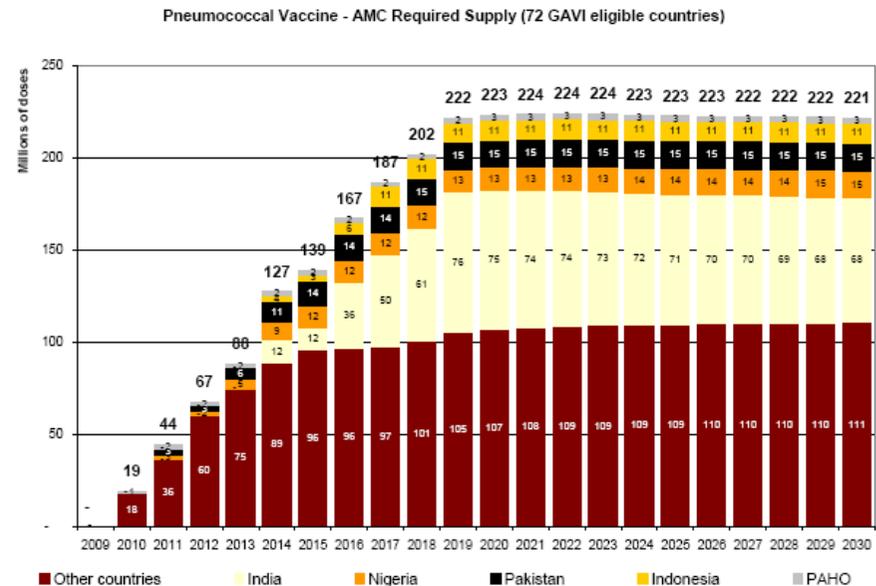
In principle, addressing complex market failures is a strength of AMCs

Writing the AMC contract required a good sense of many parameters

- Overall **supply commitment size** (driven by need estimates)
 - **Tranche size** (driven by timing of entry)
 - **AMC subsidy entitlement** (driven by capital investment cost)
 - **Rate of subsidy** (driven by signaling effect)
 - **Demand guarantee** (driven by industry risk perception)
 - **Tail price ceiling** (driven by marginal cost)
-

A lesson for climate AMCs: know the industry and the policy environment

- Both demand and cost curves were fairly well understood in the Pneumo AMC (demand more so).
- Demand projections were the result of close cooperation with developing-country counterparts, and intimate knowledge of the policy environment.
- Yet, it *still* proved hard to get the parameters right.
- There are risks in AMCs:
 - Non-participation;
 - Windfall profits.
- Understanding demand and cost well is crucial in limiting risk.

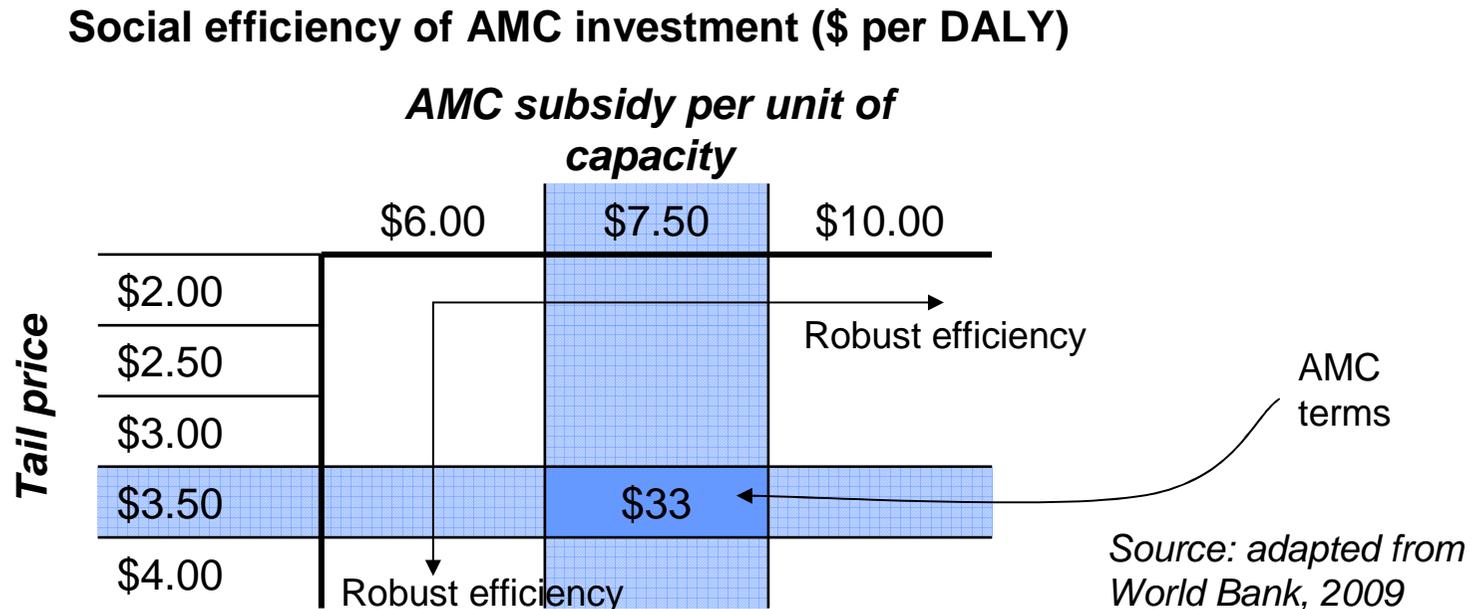


Source: GAVI Strategic Demand Forecast, 2009

Social efficiency facilitated decision-making

- Uncertainty over cost estimates – could reduce it, but not eliminate
- Market power: needed to get several firms to bid
- Very high and robust social value

Therefore: precaution called for maximizing the likelihood of success, rather than marginally reducing cost



Another lesson for climate AMCs: know the product's social returns

- Because of asymmetric information, and/or because technology is not yet there, uncertainty will remain despite due diligence
- It will generally be hard to answer the question “what are the *optimal* parameters?”
- IF social efficiency of the proposal is high and robust, it is enough to answer the question:

“Are the proposed parameters reasonably efficient and have a chance of leading to a successful AMC?”

An analogy based on good social returns: robust off-grid renewable energy

Thought experiment: is a traditional AMC suitable for financing off-grid renewable energy in developing countries that can be installed, operated and maintained with local capacities?

- High social returns;
 - Clearly defined need;
 - Contract could require long-term delivery/maintenance to force capacity dedicated to developing countries.
 - Indivisibilities in research cost incurred to adapt product to low-cost, locally maintained deployment;
 - Market test inherent in AMC may be better suited than X-prize to ensure technology is robust.
-

Limits of the analogy

- *A very different market, with far less market power;*
- Social returns may be less clear in comparing clean tech v. traditional off-grid;
- Hard to monitor performance;
- Need may be less clear in long-term, as grids may expand.

Product characteristics are less naturally defined than for vaccines:

- Offer contract for a specific technology?
 - Or request general “off/micro-grid technology with certain generating capacity, at certain cost and emissions level and certifiably (by whom?) suited for local O/M”
-

Takeaway points

- For pull-mechanisms (AMC+) in the climate area, leveraging private funds is key;
 - A full-fledged AMC like vaccine AMC is powerful, because it can address multiple market failures;
 - But the structure is complex;
 - And there is both political and non-performance risk in AMCs;
 - Getting it right requires a good knowledge of the details:
 - Product;
 - Market;
 - Industry;
 - Policy environment.
 - So, think carefully about whether to apply an AMC, and tailor it to the desired purpose.
-

