# Mobilizing Resources for Climate Finance

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# Content

1. Sources: principle, scale and bundles
2. Focus on subsidies
3. Current flows in public and private sources
4. Intermediaries: new potential players in the developing world

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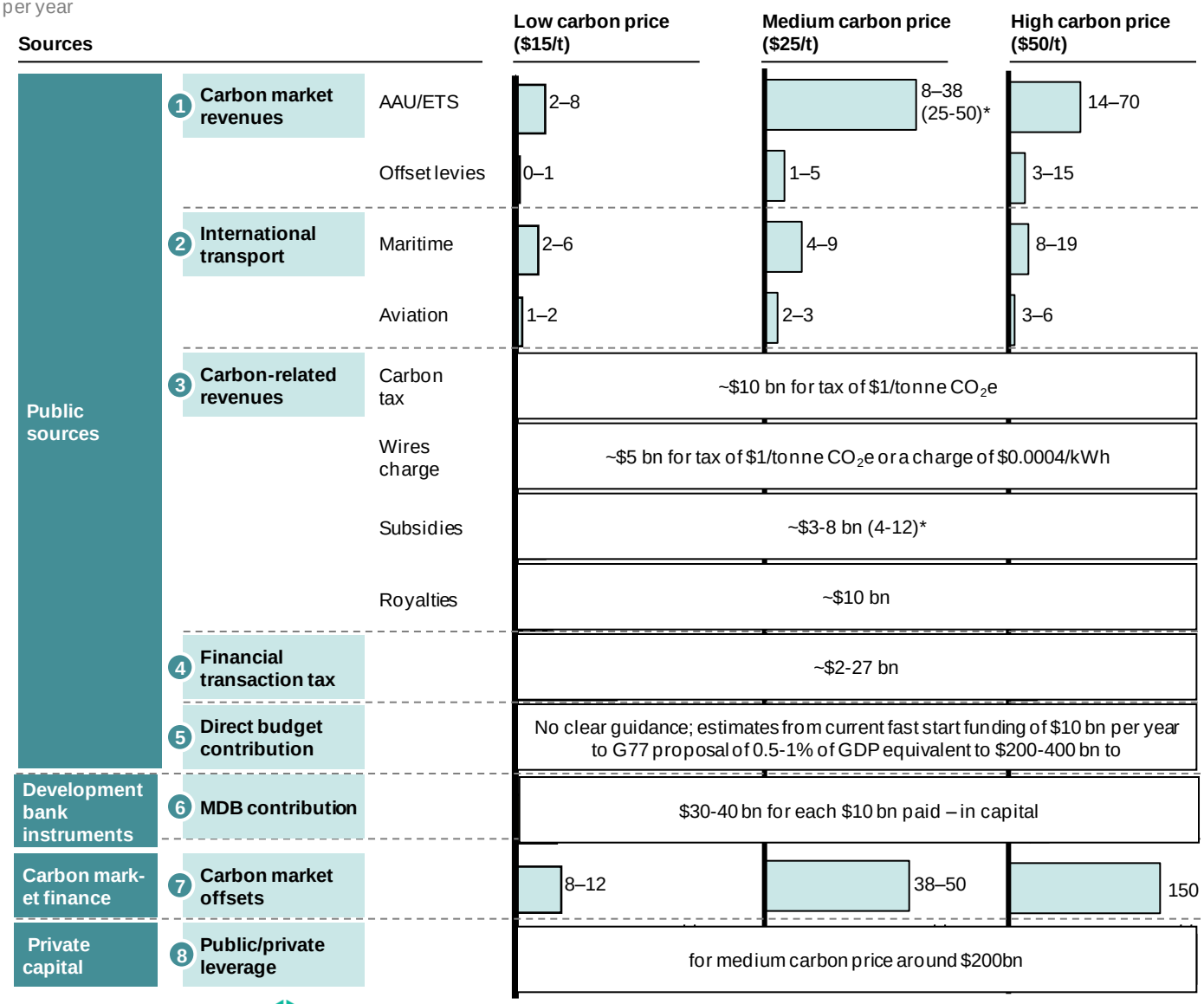
Source Romani and Stern (2011)

# Sources of finance: the principles

1. Taxing the bad
2. Additionality as new-ness or innovative finance
3. Incidence on rich countries only
4. Public sources needed for adaptation and market failures
5. Scalability, robustness and credibility
6. Raising domestic revenues in developed countries

# Sources of finance: individual sources

$bn, 2020, per year

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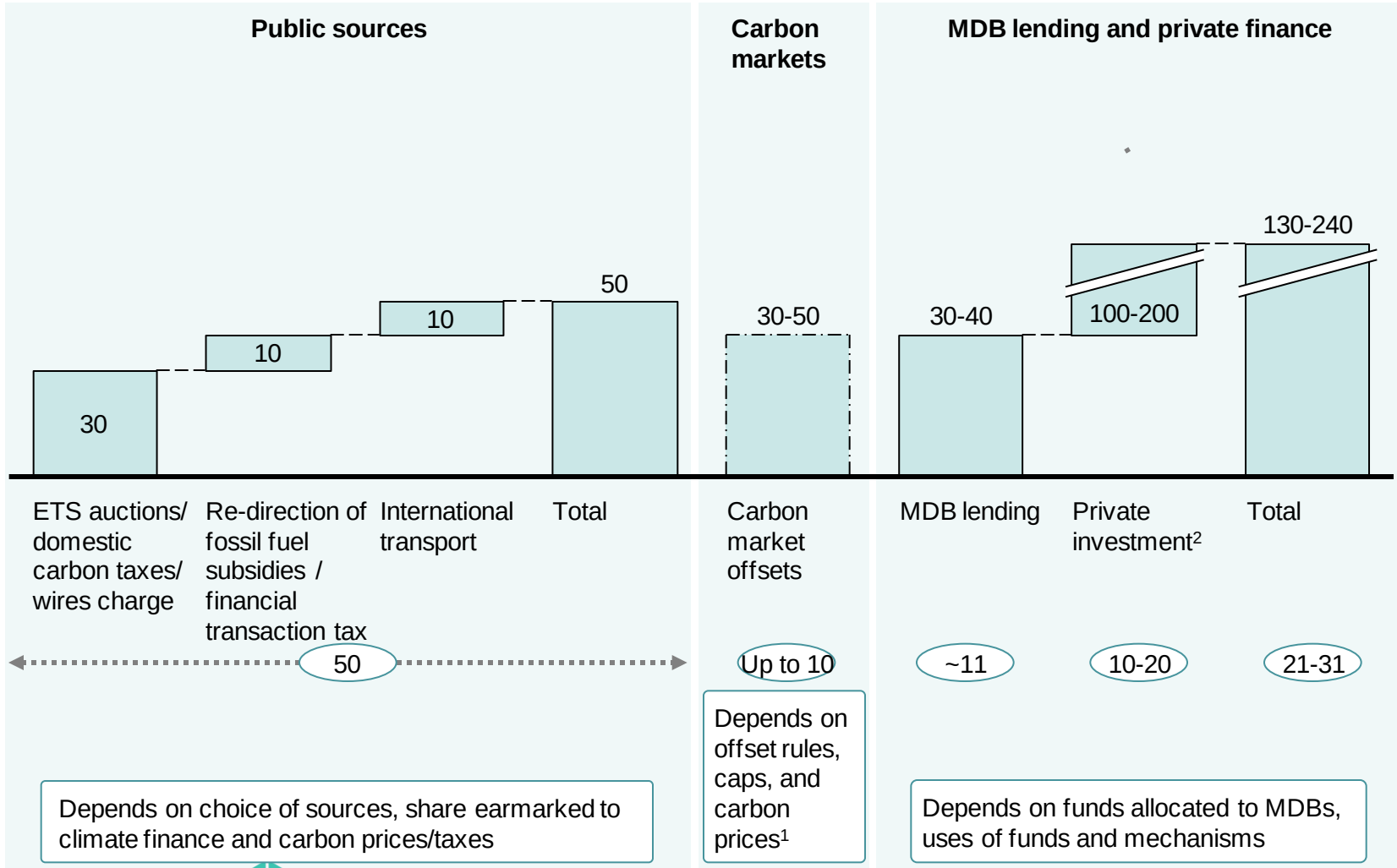
** Estimates in parenthesis are from World Bank (2011). Mobilizing Climate Finance. Washington DC*
*Note: The figures in this table refer to the flows available for international climate finance using AGF and World Bank assumptions. A substantial amount of revenues, not accounted for in this table, would be retained in national budgets. For example, the AGF assumes that 90% of auction revenues and 50- 75% of travel would be retained domestically*

# Approximately $50bn could be raised from public sources with a carbon price of $20-25

$bn, 2020, per year




1 Not counted towards financing needs as carbon finance increases needs proportionally
2 International private finance; excludes domestic private finance

SOURCE: AGF report

# Sources of finance: the bundles

- 'Bundles' of mutually supportive and consistent financial sources are particularly attractive:
  - Provide source countries with flexibility in choosing domestic sources according to countries' preferences
  - Allows for the spreading of the risks associated with individual sources not delivering the expected flows increasing reliability
  - Different sources can reinforce each other, strengthening arguments for their joint inclusion in any package or bundle.
  - They allow for predictability on pathway of sources and hence of flows
- Some sources will overlap with each other, the overall revenue potential of a bundle, therefore, is not necessarily the sum of its parts
- Bundles are built on the dynamic relationship between sources, and potential for mutual reinforcement in the context of a move towards a low-carbon economy

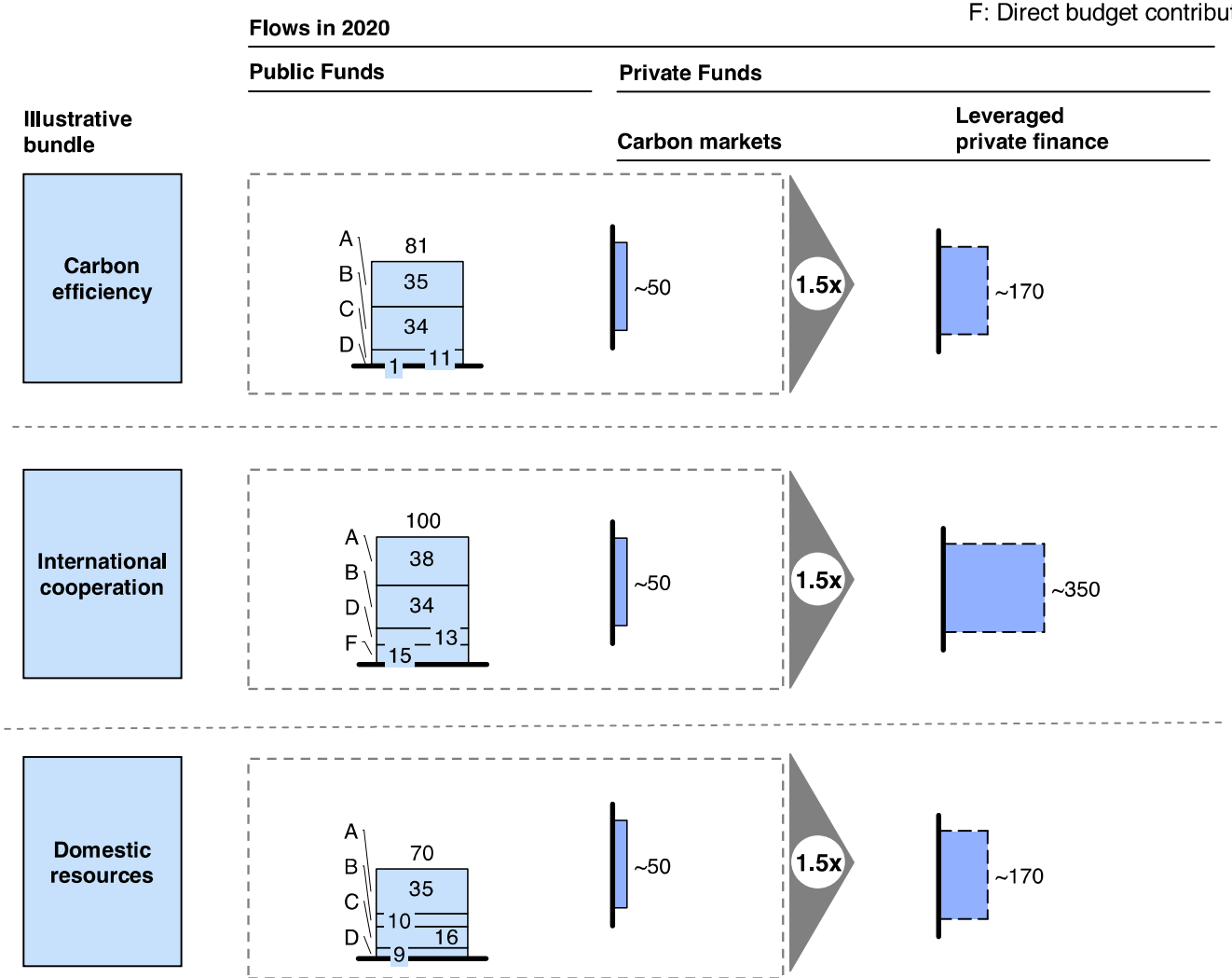


SOURCE: AGF report

# Illustration of potential bundles

$ Billions

A: Carbon market public revenues
B: International transport
C: Carbon related revenues
D: IFIs
E: Financial transactions tax
F: Direct budget contributions




Source Romani and Stern (2011)

# Bundles will need action by different parties

| Sources | Action required by |
| --- | --- |
| Funds collected domestically<br>▪ Carbon tax, auctioned domestic allowances, lower fossil fuel subsidies, higher fossil fuel royalties, wires charge | Developed countries governments in national decisions |
| Funds collected domestically<br>▪ Financial transactions tax, border cost leveling, carbon exports optimization tax | Developed country governments in coordination with international institutions (eg WTO) |
| Funds collected internationally<br>▪ Pricing of international aviation and shipping emissions, auctioned AAUs | International agreements with highly coordinated action |
| Leveraged private funds<br>▪ Carbon market, MDB capital increase, private flows leveraged by public policies and instruments | Governments of both developed and developing countries in close collaboration with private sector |

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Source Romani and Stern (2011)

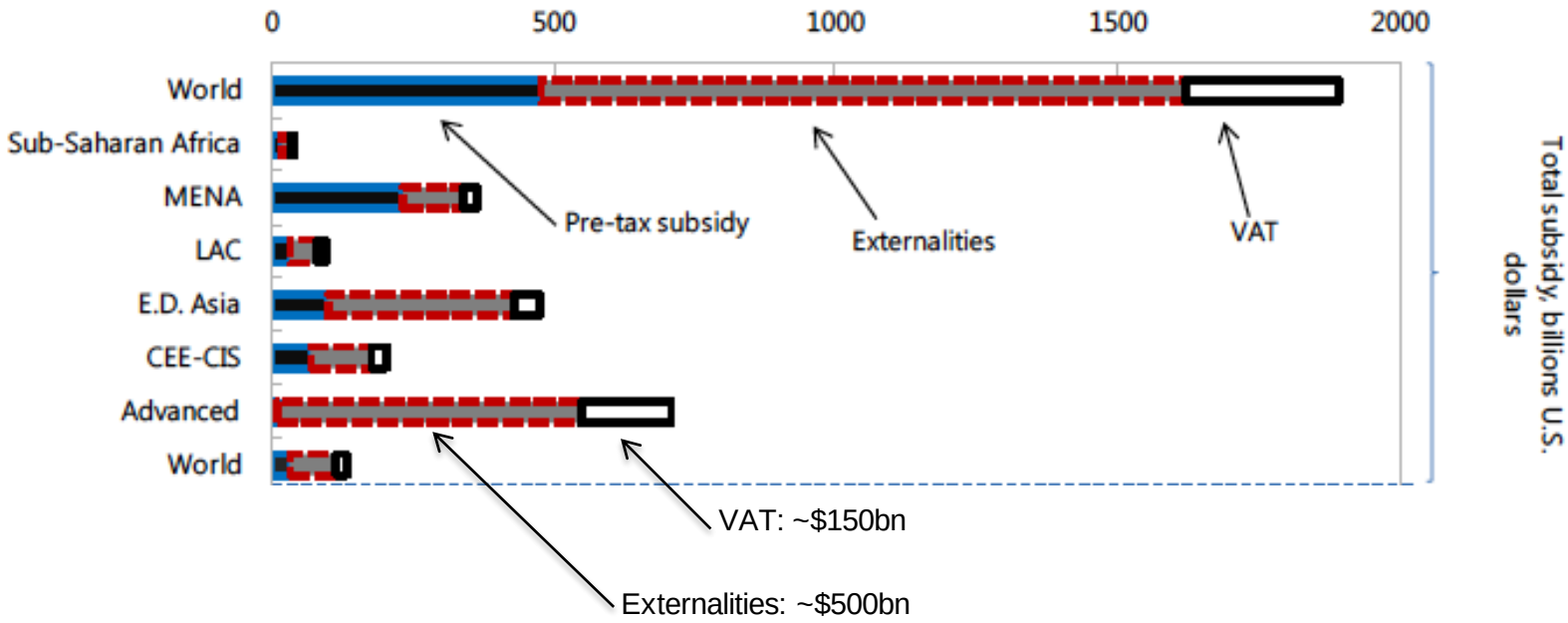
# Fossil fuel subsidies in advanced economies amount to$600bn+ a year

- Fossil fuel subsidies, when externalities are taken into account, are estimated at $1.9 trillion a year (2½ percent of global GDP or 8 percent of total government revenues)
  - The advanced economies account for ~40% of the global total ($600bn+every year)
  - oil exporters account for about one-third
- Removing these subsidies could lead to a 13% decline in CO2 emissions
- It would generate positive spillover effects by reducing inefficient global energy demand and supply
- In advanced economies, only aligning VAT on energy products to other products would free about $150bn a year in resources currently deployed inefficiently
  - If only 1/3 of these resources were to be used for climate finance purposed, this would generate $50bn a year of public funds in transfers to dev.ing countries
  - The rest could be kept by developed countries as domestic revenue



SOURCE: Energy Subsidy reform: lessons and implications, IMF, January 2013

# Energy subsidies including taxes and externalities, 2011

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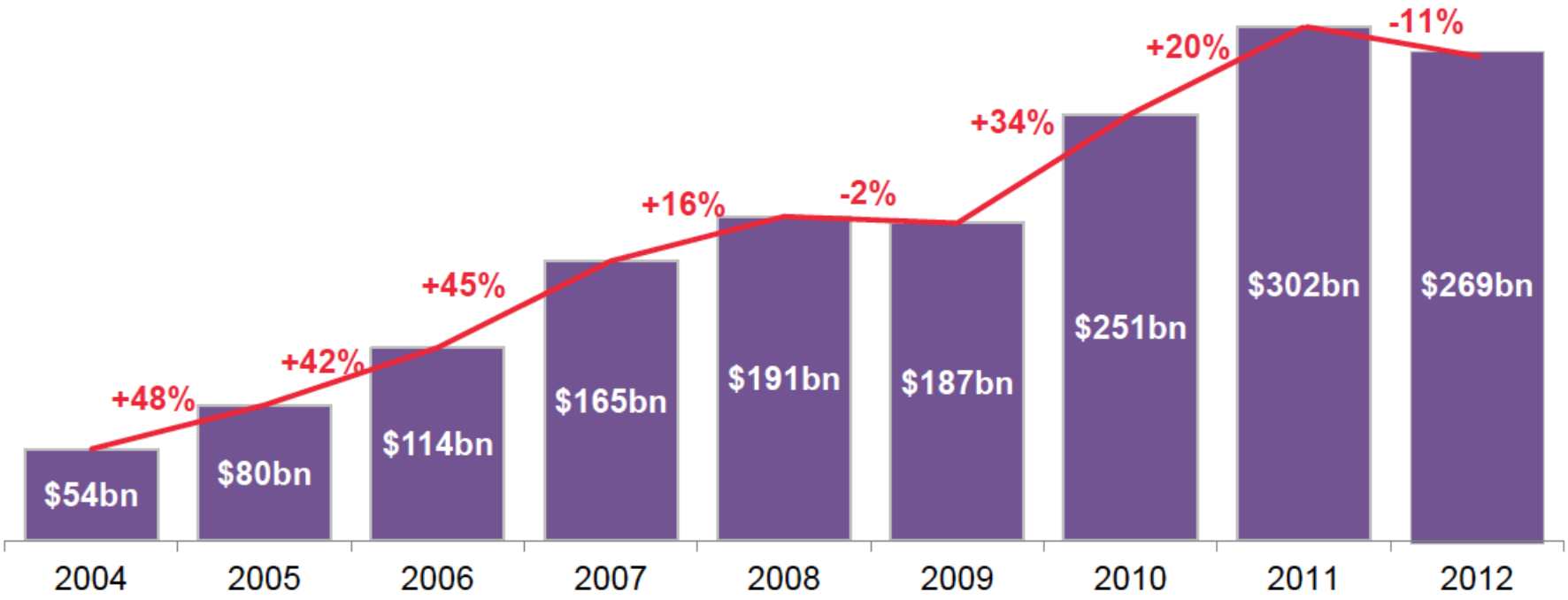
Source Romani and Stern (2011)

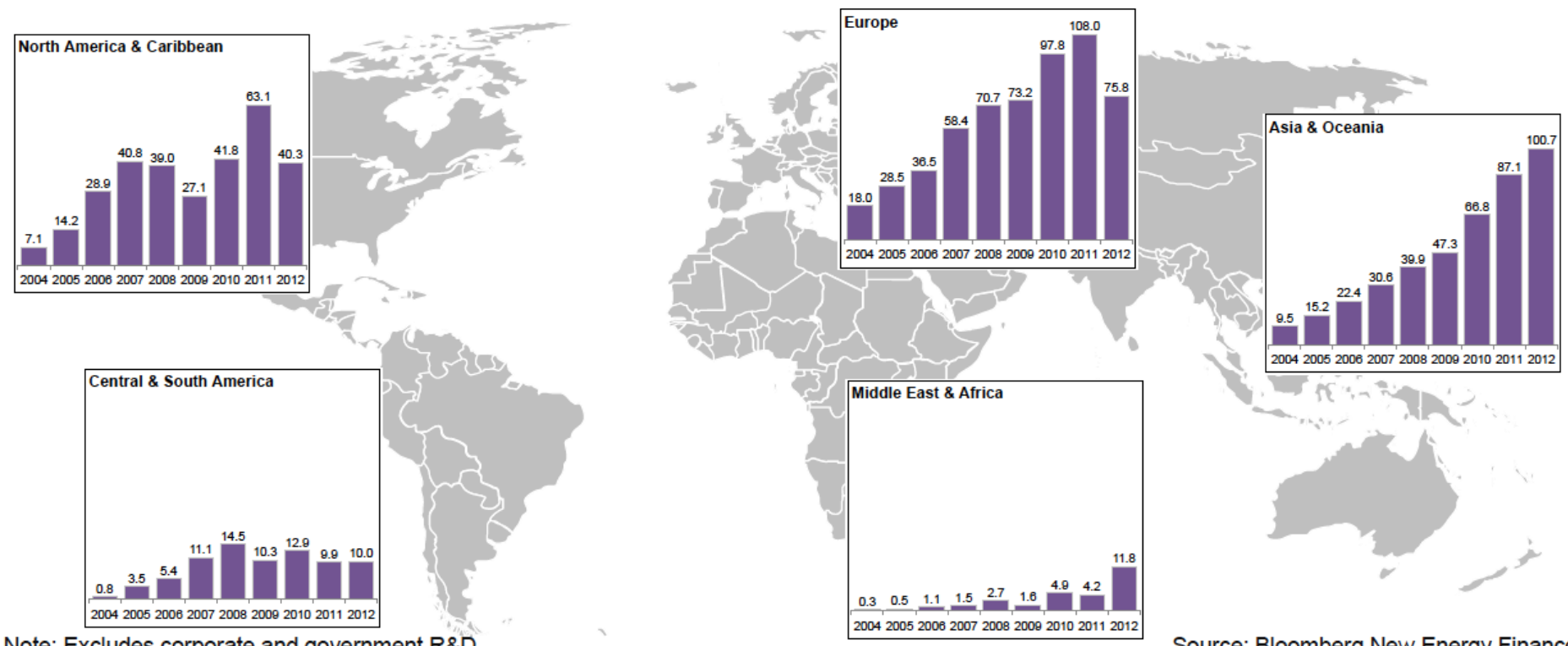
# Global total financial flows in low-carbon technologies were substantially down in 2012…




Note: Includes corporate and government R&D, and small distributed capacity. Adjusted for re-invested equity. Does not include proceeds from acquisition transactions

Source: Bloomberg New Energy Finance

# … but the reduction was driven by Europe and the US




Note: Excludes corporate and government R&D

Source: Bloomberg New Energy Finance

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SOURCE: Bloomberg new energy finance, April 2013

# Investment of $300-400bn a year, but needs are $1tr+

- **$300-400$bn includes financial flows covering …**

… mitigation & adaptation…

… flows to and from all geographies (developing and developed_

… public, public-private & private flows…

… incremental cost & investment capital…

… gross & net flows

- **These are very different flows from $100bn commitment…**

… only developed to developing

… primarily public grants, loans and private only in 'grant equivalence'

… counted as net

… only additional funds (on top of already committed public funds)



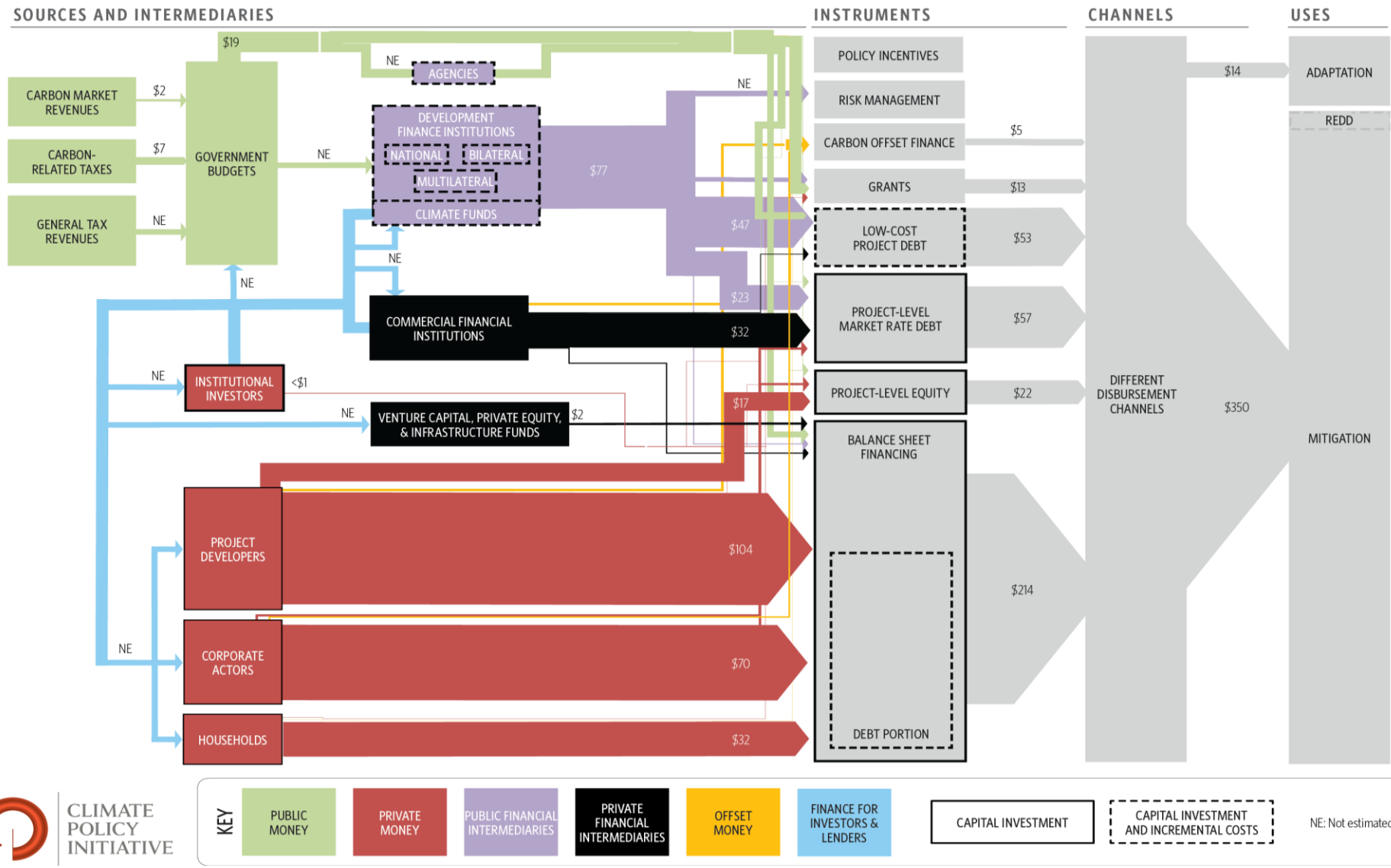
SOURCE: Climate Policy Initiative, San Giorgio Group, April 2013

# Private finance represents the greatest share of finance

- **Public sources: ~20$ bn**
  - ODA more than doubled compared to last year (translated in almost $70-80bn in gross flows from development banks and institutions)
  - 11$ bn domestic renewable projects (primarily driven by U.S. stimulus)
- **Private finance: ~230$ bn**
  - The inclusion of small-scale renewable energy finance highlights the significant contribution of households and corporate actors (~80$ bn).
- **Public money standing behind private money: ~50$ bn**
  - ~50$ bn could be classified as governments' direct and indirect shareholdings and lending to private investment structures



SOURCE: Climate Policy Initiative, San Giorgio Group, April 2013

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SOURCE: Climate Policy Initiative, San Giorgio Group, April 2013

# Intermediaries managed 1/3 of total flows while the rest if ownership and investment

- **Public intermediaries (e.g. development banks)**
  - ~70-80$bn
- **Private intermediaries (e.g. private banks)**
  - ~40$bn
- **Private ownership of assets and investment (e.g. on balance sheet, equity investment)**
  - ~$200bn+

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SOURCE: Energy Subsidy reform: lessons and implications, IMF, January 2013

# Most investment go to renewables, with EMDCs being the main recipients

- **Sectors. Mitigation vs. adaptation.**
  - Renewable **energy generation** projects (85%) and **energy efficiency** (4%) main investment sectors
  - REDD+ flows around **USD 11.8 billion** per year (predominantly domestic)
- **Recipients. Developed vs. developing countries.**
  - China, Brazil, and India were the largest recipients receiving **close to 1/3 or total**
  - Large share raised domestically and disbursed by **state-owned entities** (e.g. BNDES in Brazil)



SOURCE: Energy Subsidy reform: lessons and implications, IMF, January 2013

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# Innovative sources: public/non-market funds

| | Market | Non-market |
|---|---|---|
| Public | Compliance markets<br>Creditable NAMA<br>Bilateral markets | GCF<br>New dev.ing countries-led IFIs<br>Decentralised (National) Funds<br>Bilateral initiatives<br>(performance based payments) |
| Private | Compliance markets<br>Creditable NAMA<br>Voluntary markets | CRS<br>PR<br>Foundations/Charities |

Source: Satgas REDD+ (2012)

# New EMDCs-led funds can play a 'blending role' in channelling public climate funds from developed countries

- A number of new funds are being created, mostly led by EMDCs
  - GCF (public and private, funded by dev.ed countries, focused on climate, likely fund of funds, concessional lending and grants)
  - ASEAN Infra Fund (public and private, focused on infra, funded by dev.ing countries, non-concessional lending)
  - BRICS-led New Development Bank (public and private, focused on infra, funded by dev.ing countries, non-concessional lending)
- Great opportunity to 'blend' concessional funding from dev.ed countries – in the context of the 100bn commitment – with investment and funds managed and governed by developing countries led institutions



Source: Climate Policy Initiative (2011)

# Conclusions and recommendations

- **Removal of fossil fuel subsidies** in advanced economies can free substantial resources ($500bn+) and be at the core of a 'domestic finance' bundle
  - Only adjusting VAT would produce $150bn a year
  - G20 commitment is in the right direction – **action is now needed**
- Climate finance commitments are still far from being met, but **ODA and other public transfers to developing countries are increasing**
  - Little predictability and current and future flows, making it **very difficult for developing countries to plan**
- Public finance intermediaries (such as IFIs, NDBs, etc) are becoming larger and more effective in leveraging climate finance
  - NDBs in particular are playing a larger and larger role, but mostly funded domestically
  - New developing countries-led funds can be good 'blending' instruments for funds committed by developed countries
- Private finance dominates the picture of current flows, although most of it is in the form of **companies' balance sheet and direct equity investment**
  - Institutional investors are still largely absent



Source: Climate Policy Initiative (2011)

# Thank you

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