

3rd Biennial Assessment and Overview of Climate Finance Flows

ZERO ORDER DRAFT

10 April 2018



Chapter I: Methodological issues relating to the measurement, reporting and verification of climate finance



Outline and preliminary work

- Key messages
- Introduction
- Measurement, reporting and reviewing of climate finance flows
- Reporting and reviewing of climate finance under the Convention
- Systems to track and report climate finance at the domestic level
- Methods to track and estimate total private finance
- Information on emerging methodologies for measuring mitigation and adaptation finance outcomes
- Insights on emerging practices and metrics relevant for the tracking progress towards the goal outlined in Article 2.1 (c) by different actors
- Other methodological issues
- Chapter summary



The Chapter will seek to generate information on:

- How ongoing efforts aimed at harmonization of reporting approaches of data producers and aggregators enhance clarity, consistency and transparency of climate finance flows compared to findings in the 2016 and 2014 BAs.
- Progress made in enhancing consistency, transparency, and completeness of the provision of information on financial support provided and received by relevant individual Parties under the Convention.
- Progress made in developing methodologies for aggregation of climate finance flows.
- State of play on reporting of impact of mitigation and adaptation finance.
- State of play on metrics and methods for assessing availability of information that is needed to track global progress towards the goal outlined in Article 2.1 (c), of the Paris Agreement.



1.2 Measurement, reporting and reviewing of climate finance flows (i.e. external MRV systems)

- Updated information on operational definition of climate finance and criteria used by various institutions

Institution	Climate finance	Mitigation finance	Eligibility	Adaptation finance	Eligibility	References
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- Updated information on reporting approaches used by selected organizations

Topic	UNFCCC	OECD DAC	MDBs	IDFC	BNEF	Notes/sources
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Topics: Who submits data? Who prepares integrated report or compilation of information? Who classifies projects? Reporting approach? Criteria for adaptation eligibility? Criteria for mitigation eligibility? Types or sources of funds? Financial instruments? Sectors? Status / Point of estimation? Dealing with overlaps? Granularity? Type of support? Recipient? Reporting period? Reporting guidance? Quality control procedures? Review procedures? Format?

- Updated information on review processes, aggregation methodologies, accounting frameworks



1.3 Reporting and reviewing of climate finance under the Convention (i.e. internal MRV systems)

- Reporting, reviewing and verifying of financial information on support provided by developed to developing countries

- *Information on the provision of information on methodologies used and the related issues in BR3 CTF*

Reporting parameter	Guidance for reporting (including BR guidelines (decision 2/CP.17) and footnotes to CTF tables)	Reporting issues in BR3 CTFs
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Reporting parameters:

- *Documentation boxes in BR CTFs:* Core-general, Climate-specific, Status, Funding sources, Financial instruments, Type of support, Sector, New and additional
- *Other:* Year, Recipient country/region/project /programme

- *Information on the technical review*

- Reporting and reviewing climate finance received by developing countries/BURs

Party	Approach to reporting	Allocation channel	Sector	Financial instrument
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- Reporting on climate finance by the operating entities of the Financial Mechanism of the Convention and the Kyoto Protocol



1.4 Systems to track and report climate finance at the domestic level

- *Information on methodologies used in tracking and reporting domestic climate finance via national reports, CPEIRs, other studies*
- Country case studies describing the national/domestic tracking reporting system

1.5 Methods to track and estimate total private finance

- *Information on approaches used for estimating, tracking and reporting on mobilization/co-financing of private finance by select international institutions.*

Potential parameters:

- | | |
|-------------------------------|-----------------------------|
| •Operational definition | •Addressing double counting |
| •Direct/indirect mobilisation | •Measurement base |
| •Types of funds | •Reporting period |
| •Financial instruments | •Reporting framework |
| •Provider / Channel | •Quality control procedures |
| •Attribution method | •Database |
| •Coverage | |

Institutions covered: OECD/DAC, MDBs, Bilateral DFIs

- *Methods for tracking broader climate-related private finance*



1.6 Information on emerging methodologies for measuring mitigation and adaptation finance outcomes

1.7 Insights on emerging practices and metrics relevant for the tracking progress towards the goal outlined in Article 2.1 (c) by different actors

- Insights on the ongoing efforts of various international financial institutions
- The current state of financial sector practices, standards, and metrics used for producing and disclosing information on climate related financial risks and opportunities

1.8 Other methodological issues?



Questions for discussion

- Is there any update to be shared with respect to operational definition of climate finance and reporting approaches?
- Is there any available information with respect to methodologies for estimating, tracking and reporting private finance mobilized through public intervention?
- Are there examples of domestic tracking and reporting systems that could be considered?
- Is there any information on methodologies for impact reporting that could be considered?



Chapter II: Overview of climate finance flows





Climate-related Finance Flows



Agenda

- What are we counting
- Breaking down the Onion diagram
- Review of current available data and data gaps
- Methodology for aggregating global climate finance
- Comments and feedback

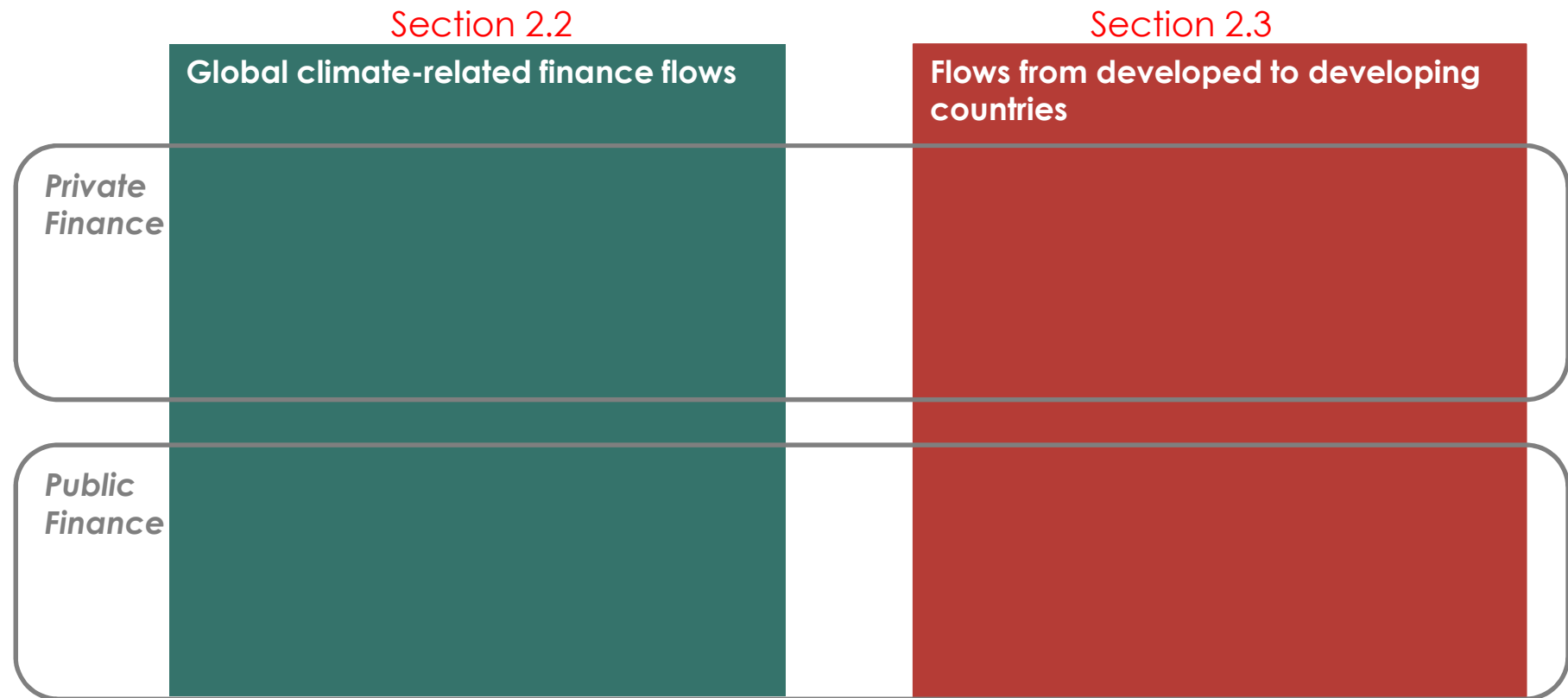


What are we counting?

- Primary finance flows – the finance for a new physical item (BA 2016)
- No double-counting



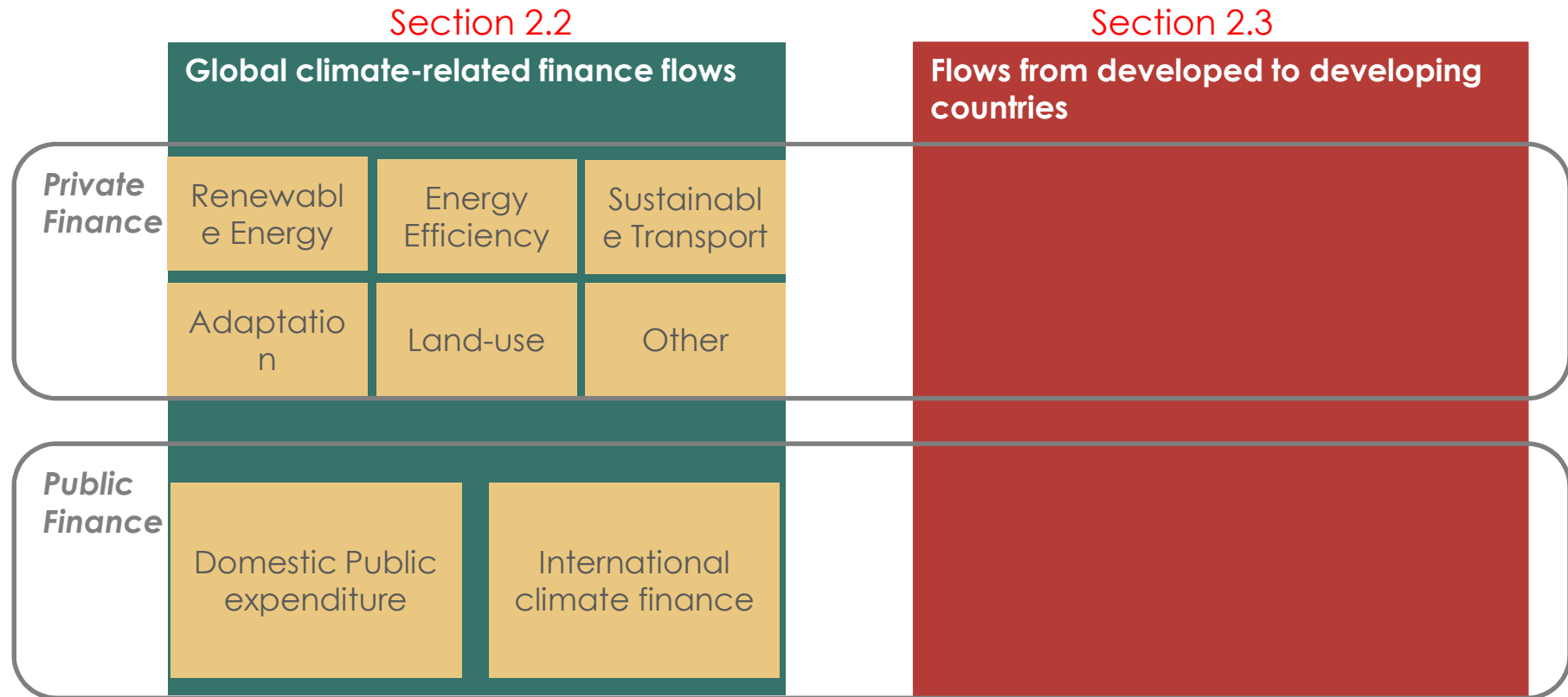
Breaking down the Onion diagram



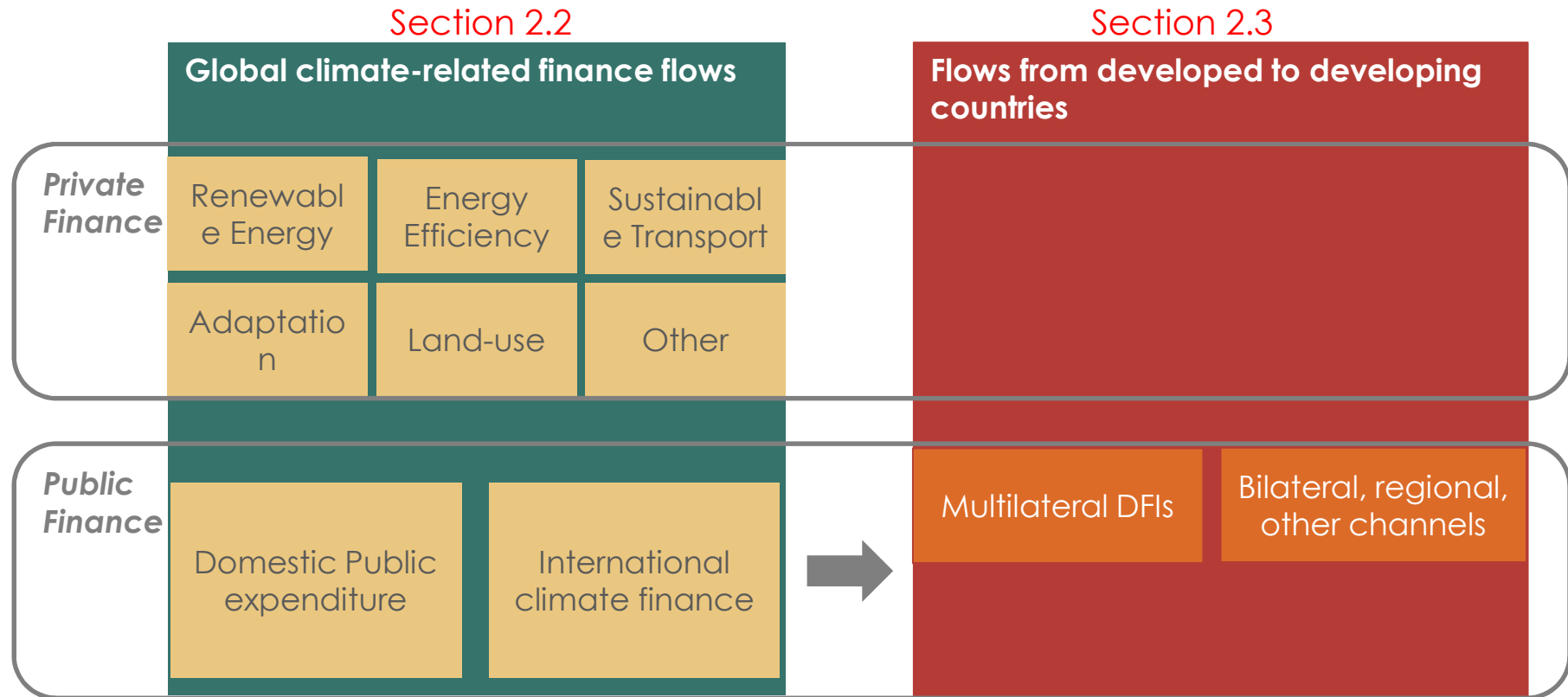
Estimates in private finance by sector compiled from literature

	Section 2.2 Global climate-related finance flows			Section 2.3 Flows from developed to developing countries
<i>Private Finance</i>	Renewable Energy	Energy Efficiency	Sustainable Transport	
	Adaptation	Land-use	Other	
<i>Public Finance</i>				

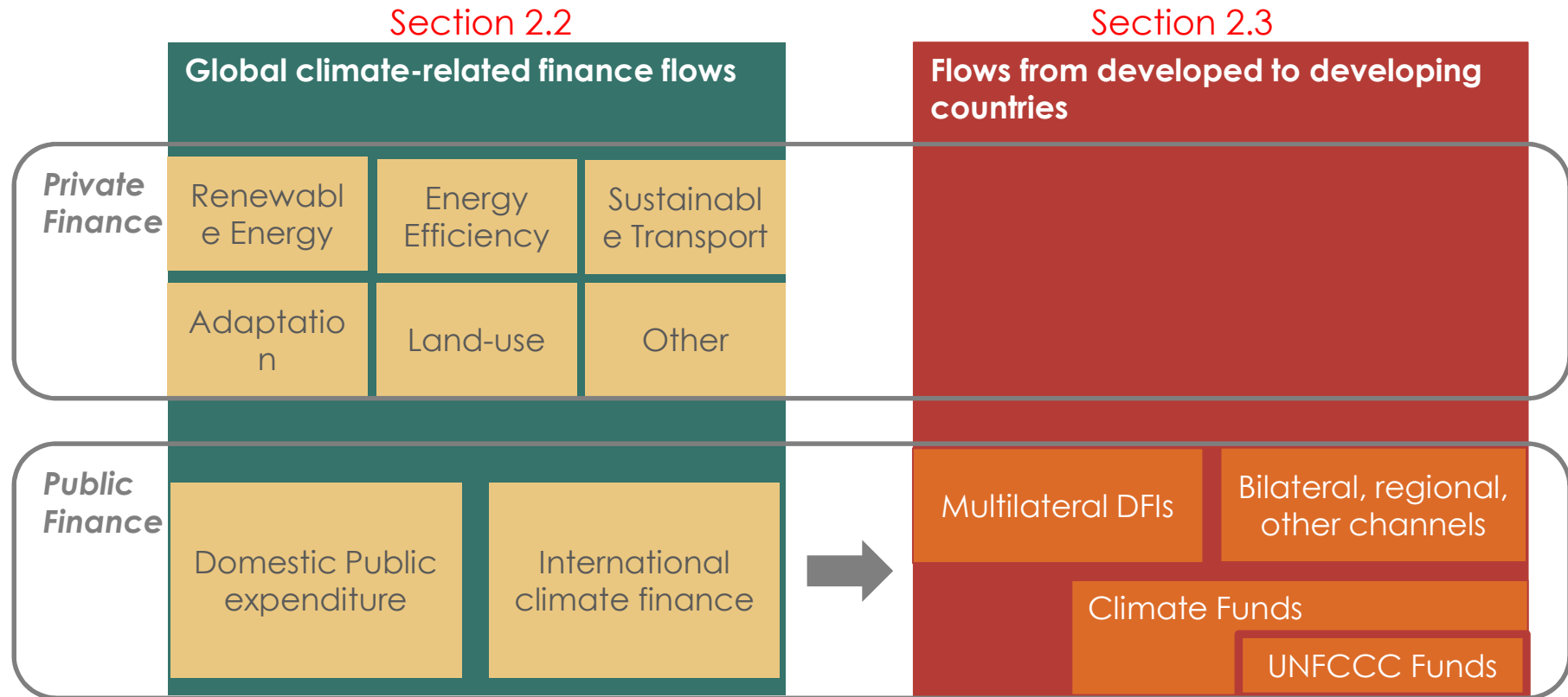
Public finance briefly summarized. Biennial reports and other literature provide data on domestic finance



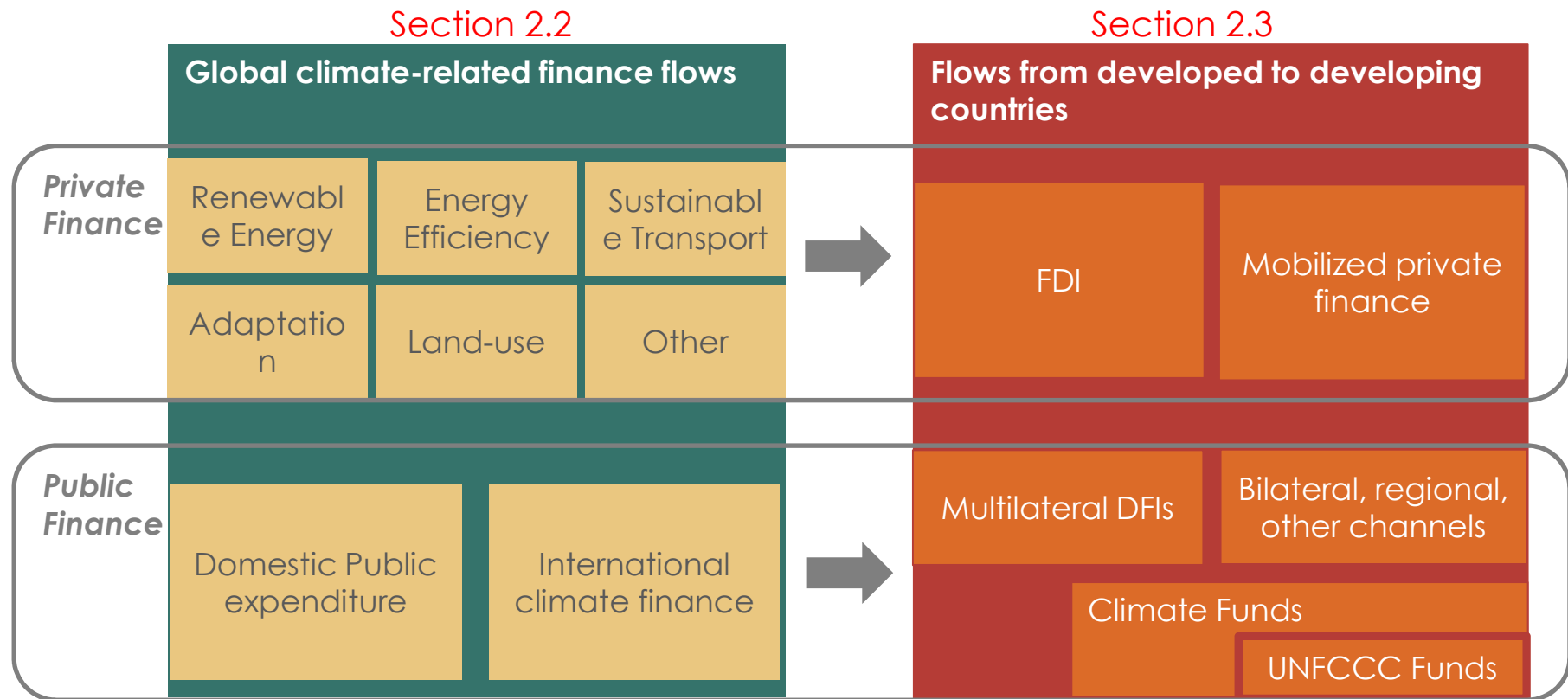
Biennial update reports, OECD DAC and literature provide data on Bilateral and Multilateral flows attributable to developed countries



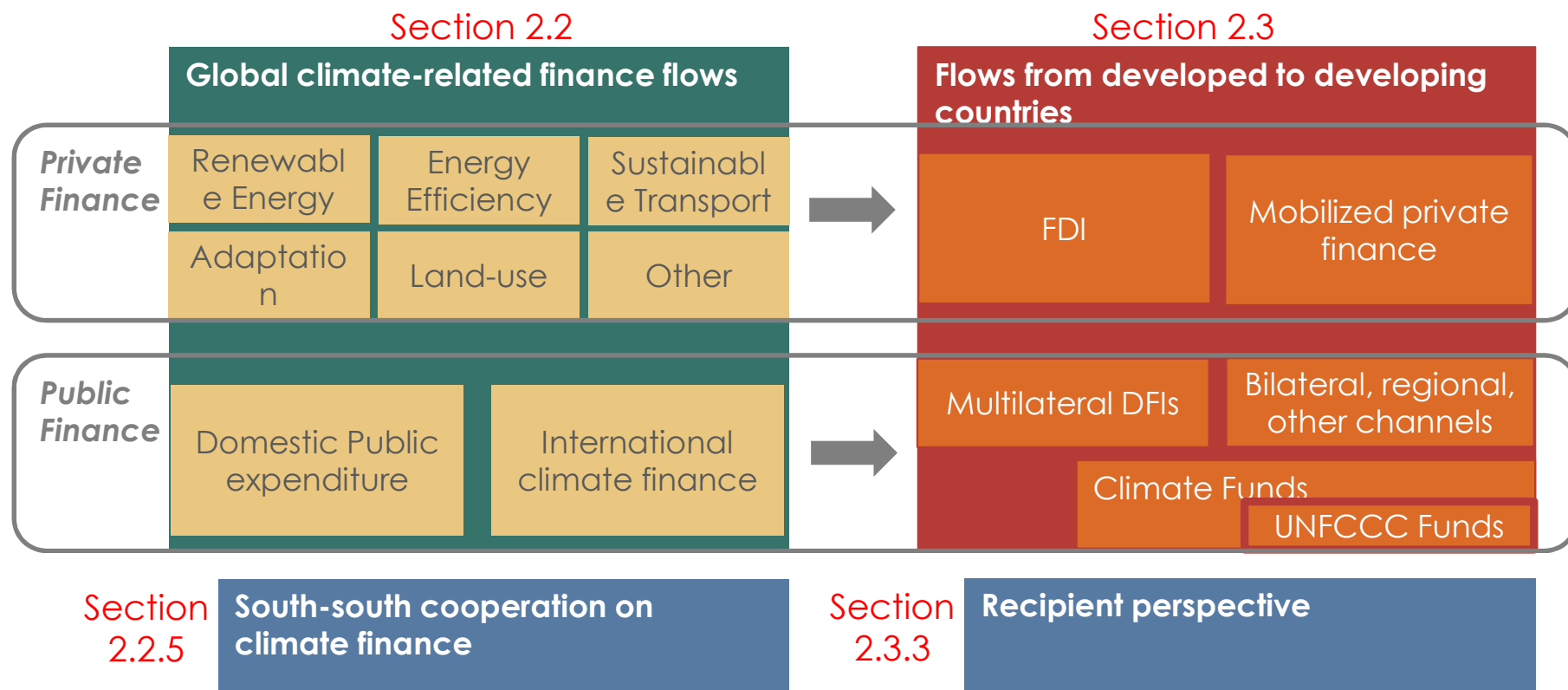
UNFCCC funds and other climate funds specified in Multilateral section



Private finance flows estimated from mobilized finance by bilateral and multilateral channels and FDI data



Sections included to take account of different perspectives



Assessing data quality and completeness of the data

- **Data quality marker:**

the quality of financial transaction information at the project level or product level data.

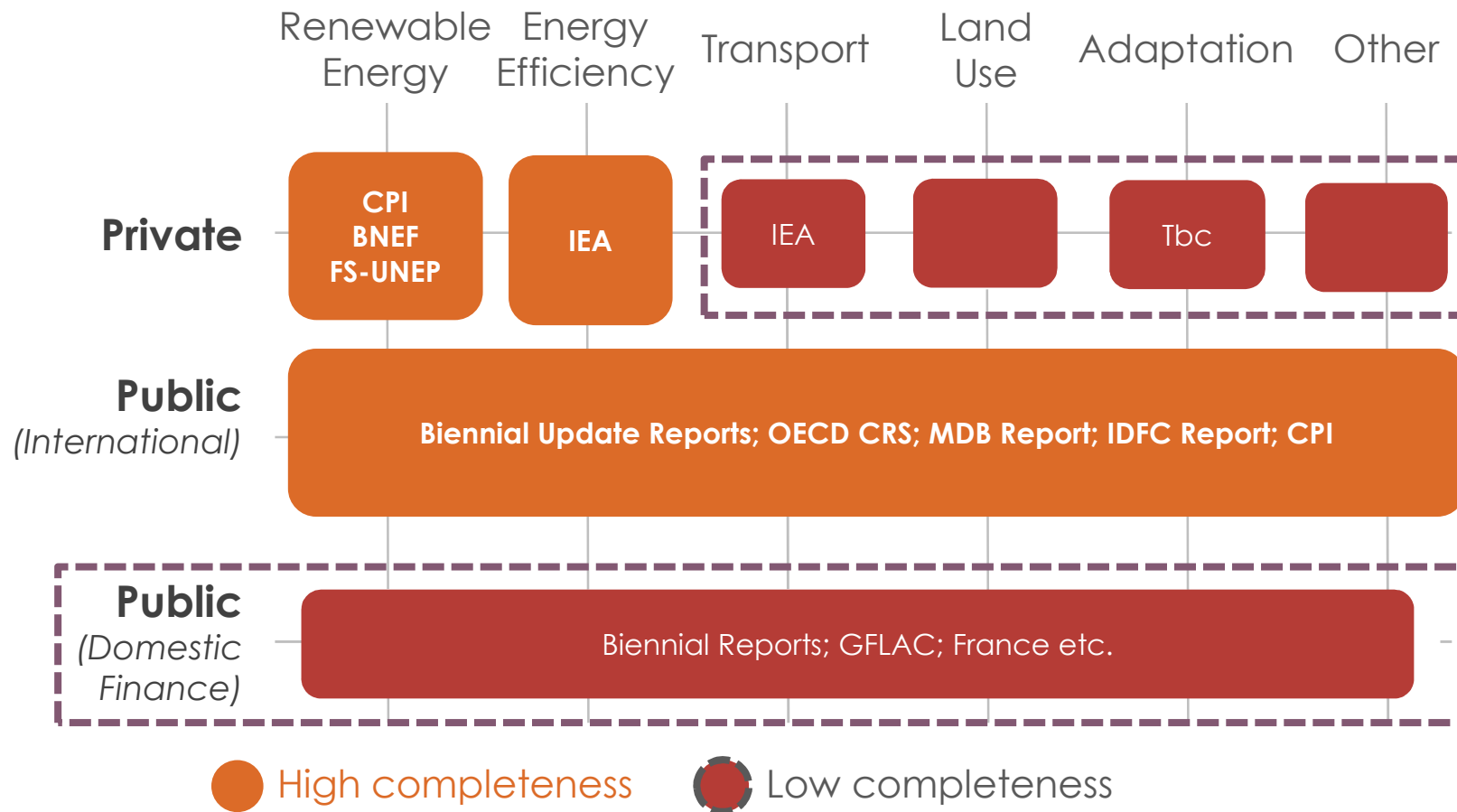
High quality data is important to ascertain that finance counted results in projects that are consistent with a low carbon and climate resilient pathway.

- **Completeness of the data marker:**

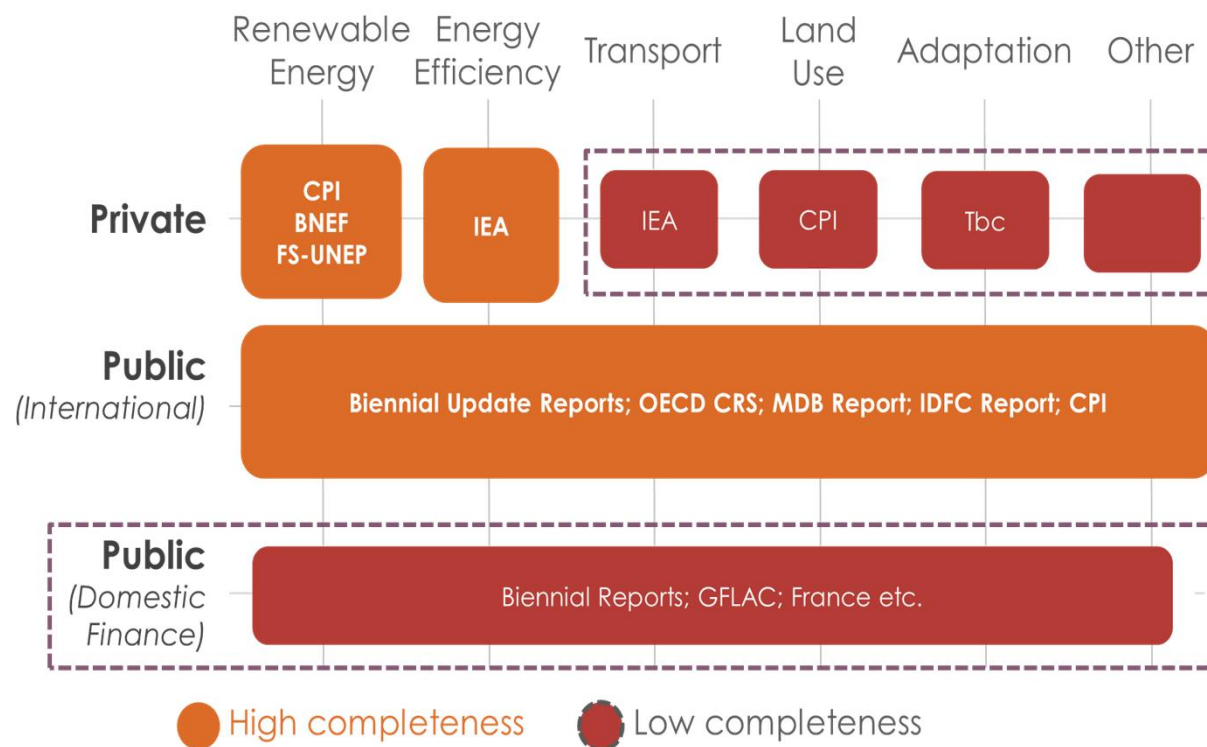
the estimated proportion of coverage of all climate-related flows in that sector



Current data gaps for 2015 and 2016 Global flows



Current data gaps for 2015 and 2016 Global flows



Data analysis for flows from developed to developing countries completed in June.



Data quality and proposed method for aggregation

	Sources of data	Data Quality	Completeness	Referred as climate finance
Renewable energy	CPI BNEF FS-UNEP	High	High	Yes
Energy efficiency	IEA	Medium	High	No
Sust. Transport	IEA/CPI	High	Low	No
Agriculture, forestry, land use	CPI	High	Low	Yes
Adaptation	Tbc	Tbc	Tbc	Yes

- Lower bound = High data quality marker + referred to as climate finance
- Higher bound = Low-High data quality marker

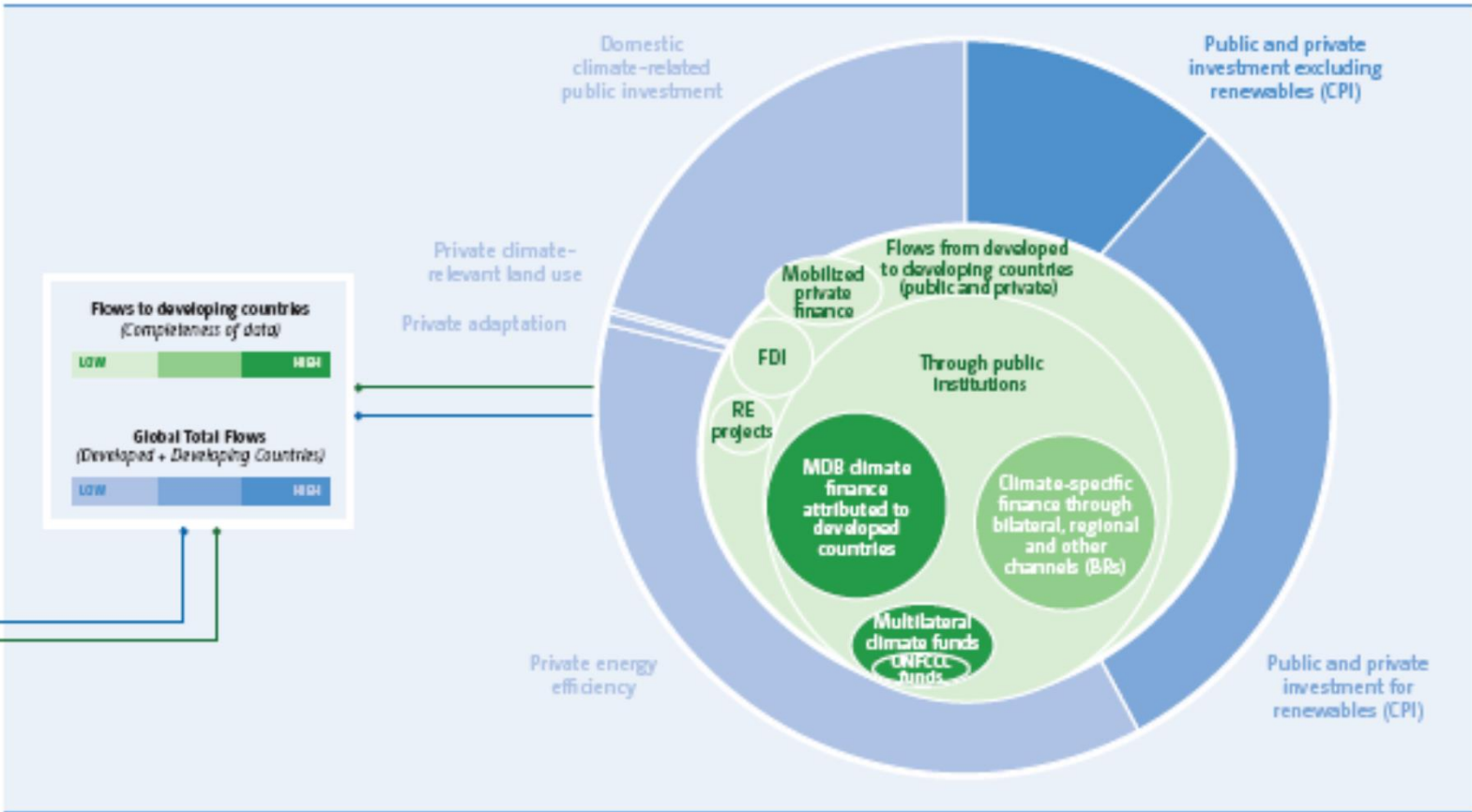


Questions for comments and feedback

- Comments on specific data referenced
 - a) Energy efficiency
 - b) Electric vehicles
 - c) Agriculture, forestry and land use
 - d) Adaptation
- Feedback on aggregation methodology of global climate finance
- Comments on approach to flows from developed to developing countries
- Feedback on visualization



Figure 1: Climate finance flows in 2013–2014 (USD billion and annualized)



Chapter III: Assessment of climate finance flows



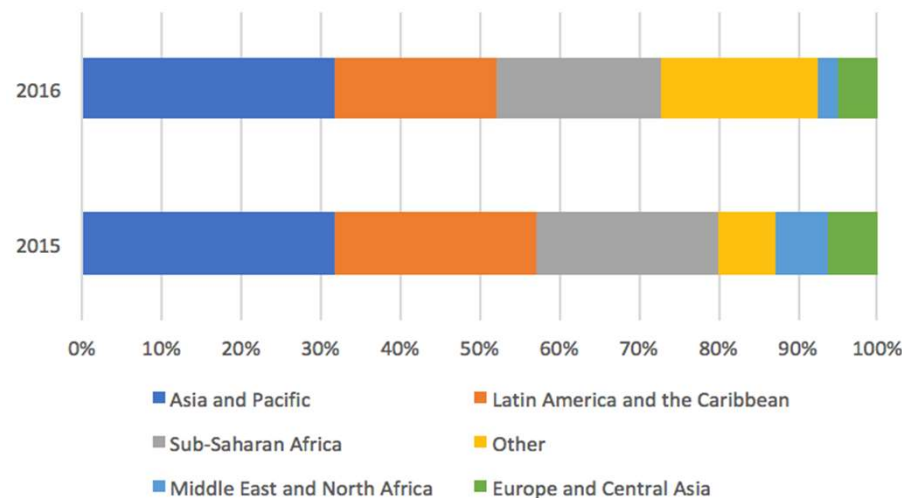
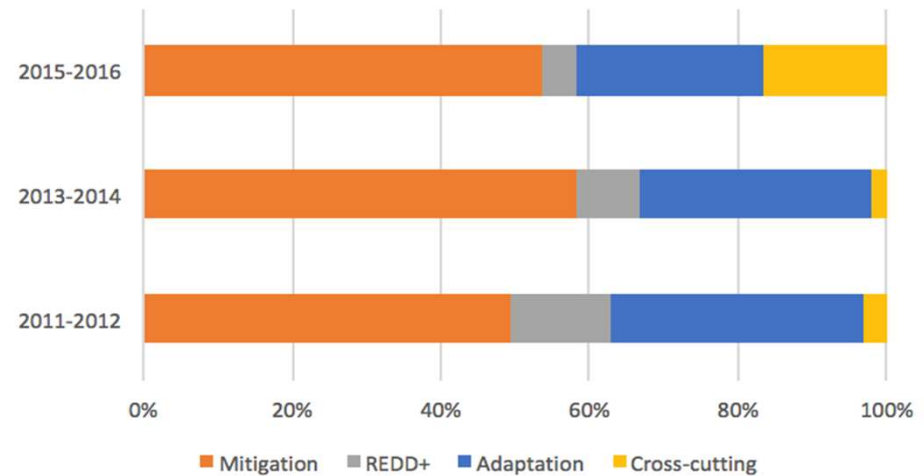
What does the assessment chapter do?

- Outlines key features of public finance from developed to developing countries, including:
 - Thematic focus
 - Geographic distribution
 - Financial instruments
- Presents insights on:
 - Access, ownership and alignment with country needs
 - Pledges, approvals and disbursements of climate finance
 - Impact of climate finance
 - Global climate finance flows in context



3.3. Thematic and geographic objectives

- Provisional thematic analysis of the multilateral climate funds shows increased 'cross cutting' support
- MDB and bilateral public finance analysis and comparison forthcoming



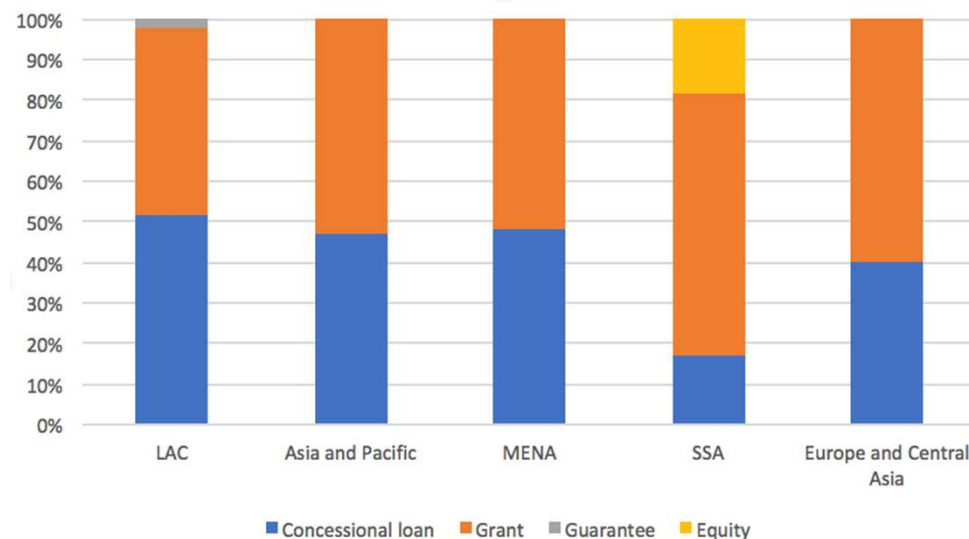
- Provisional geographic analysis of multilateral climate funds shows similar trends to previous years
- MDB and bilateral public finance analysis and comparison forthcoming



NB: Provisional analysis for the multilateral climate funds only

Financial instruments

- Relevance of financial instrument
 - Adaptation finance provision dominated by grants and mitigation by concessional loans
 - SSA receiving highest grant amounts in absolute terms



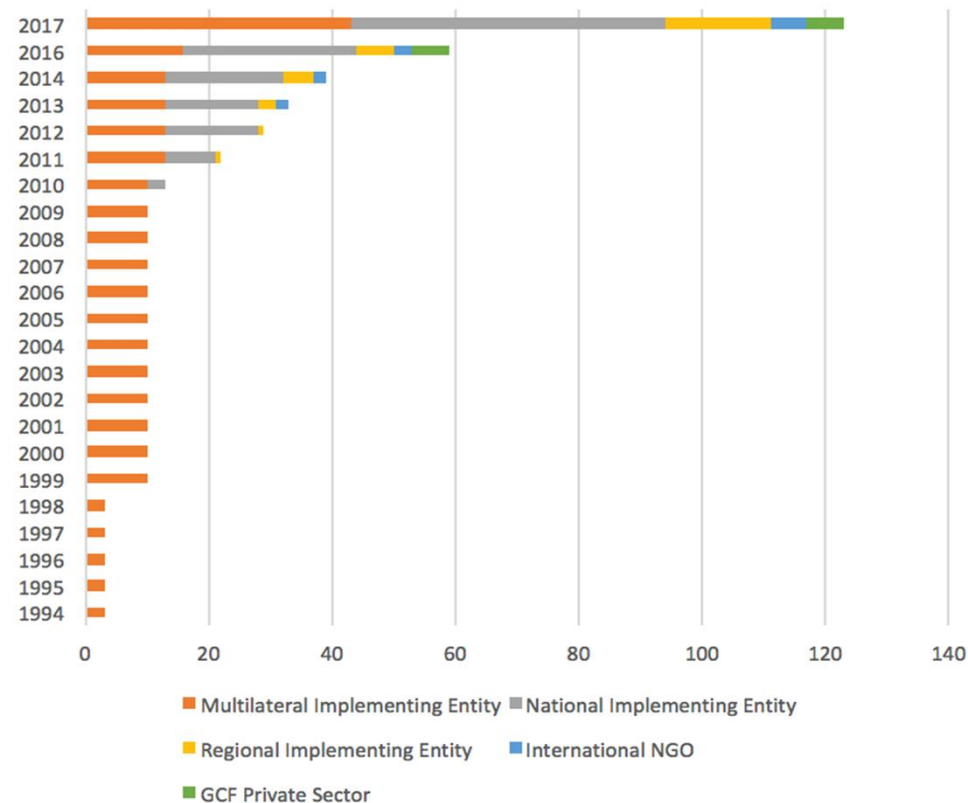
- Proposal to include in 3.3. further consideration of
 - Focus on LDCs and SIDS, in addition to regional categorisation
 - Insurance coverage and provision
 - Financial instruments addressing loss and damage



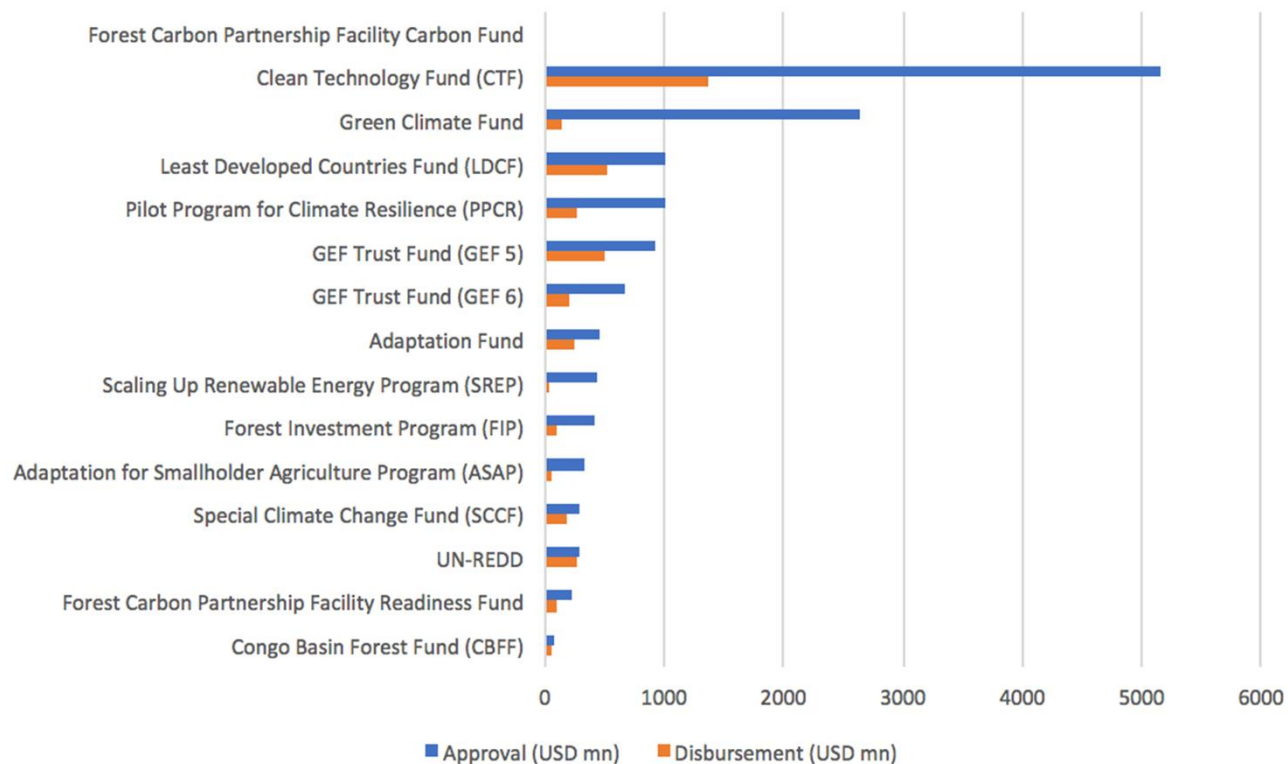
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3.4. Effectiveness: access, ownership and alignment

- Increasing number of partners through which to access climate finance through multilateral climate change funds
- Evaluation of country ownership and alignment of needs continues to suffer from lack of data, but new analyses emerging in 2018
- Proposal to include in 3.4 further consideration of the absolute volumes flowing through types of accredited entity



3.4. Effectiveness: pledges, approvals and disbursements



- Consideration of data on implementing entity accreditation periods and project approval periods
- Administration costs and implementing agency fees



Provisional analysis of the approvals and disbursements of dedicated multilateral climate funds

3.4. Effectiveness: results and impacts

- Updated BA 2016 section on results and impact of key multilateral climate change funds, plus MDB and bilateral results reporting review
- Updated discussion on leverage and mobilisation plus visualisation of co-financing

e.g. [WRI 2017](#)



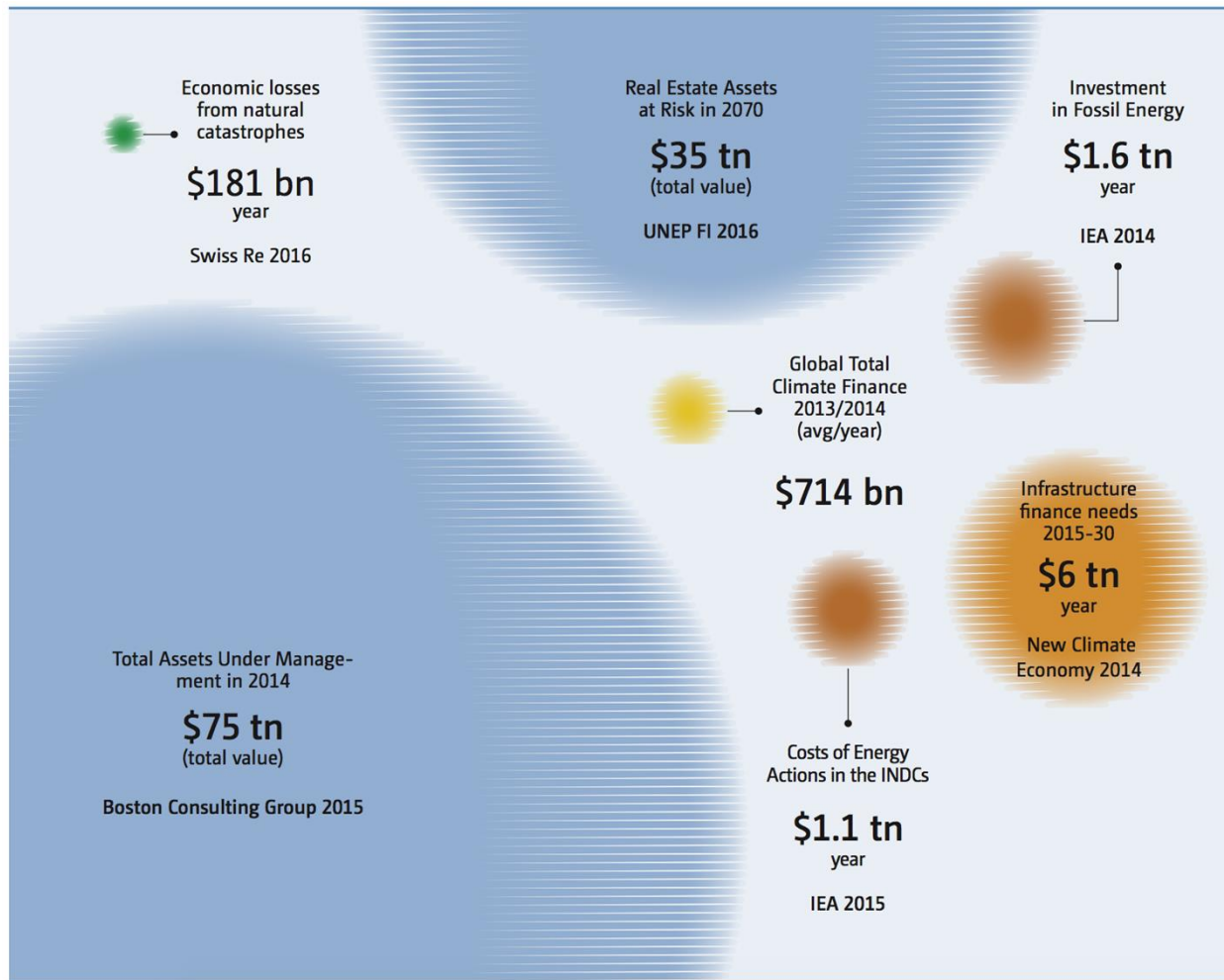
Notes: GEF, Global Environment Facility; LDCF, Least Developed Countries Fund; SCCF, Special Climate Change Fund; AF, Adaptation Fund; CTF, Clean Technology Fund; FIP, Forest Investment Program; PPCR, Pilot Program for Climate Resilience; SREP, Scaling-Up Renewable Energy Program; GCF, Green Climate Fund.

Cofinancing ratio is calculated as total expected cofinancing divided by total approved funding, cumulative amounts since fund inception, except for GEF where only GEF-5 and GEF-6 periods are included. GCF data is based on expected cofinancing. The AF does not report collated cofinancing data.

Sources: Compiled by authors, based on data from GEF 2016c, 2016f; AF 2016a; CIFs 2015a; GCF 2016b.



3.5. Global flows in context



BA 2016 Figure 2 Global climate finance in context

Visualising global climate finance flows in context

Relative annual flows

Global total climate finance	\$ X billion (annual average 2015-2016)
FDI flows to developing countries	\$ 880 billion (annual average 2015-2016)
Fossil fuel subsidies in G20 countries	\$ 230 billion (in 2014)

Opportunities to invest

Estimated costs of energy actions in all NDCs	\$1.1 trillion a year
Global investment opportunities for infrastructure, energy, energy efficiency and agriculture (2016-2030)	\$23 trillion total
Global infrastructure finance needs (2015-2030)	\$6 trillion a year

Costs of inaction

Global insured losses from natural catastrophes	\$ 136 billion in 2017
Real Estate Assets at risk in 2070	\$35 trillion (total value)



Comments and questions

- Thoughts on thematic and geographic assessment (e.g. special consideration of LDCs and SIDS, inclusion of financial instruments for loss and damage)
- Thoughts on access analysis and deepening to include flows through the accredited entities
- Suggestions to improve the assessment of the alignment of climate finance flows with NDC priorities and linkages to ownership
- Appetite or need to include more information on multilateral climate fund administration and project approval procedures



Information relevant to track collective progress towards Article 2.1c



Agenda

- Article 2.1 c and the BA outline
- Framework for mapping datasets
- Review of current available data and data gaps
- Comments and feedback



Article 2.1c and the BA draft outline

- **Article 2.1c** of Paris Agreement
Making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development
- **BA Outline** Guidance:
Mapping of available datasets that integrate climate change considerations into insurance, lending and investment decision-making processes and that include information relevant to tracking consistency with the long-term goal outlined in Article 2, paragraph 1(c), of the Paris Agreement.

Chapter 1: Methodological Issues

- Emerging practices & metrics for disclosing information in the financial sector

Chapter 2: Overview of current climate finance

- Mapping available datasets that reveal the integration of climate into flows and processes in the financial sector

Chapter 3: Assessment of climate finance

- Global climate finance in context
- Alignment of flows



Article 2.1c and the BA outline and relevance of Chapter 1

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Article 2.1c and the BA outline and relevance of Chapter 2

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Framework for mapping available datasets relevant to 2.1c

- Distinct from the climate-related *primary* finance flows into new projects discussed in the climate-related finance flows section
- Systematic view on all **financial flows** across financial markets as they relate to insurance provision, lending, and investment **decision-making processes**.
- Data on these categories are broken into quantitative **flows** data, and qualitative **processes** data.
- Flows data are further broken down into new annual flows and total stock measurements as two different datapoints to further track consistency



Mapping datasets: How have climate change considerations been integrated?

	Quantitative Flows		Qualitative Processes	
	Datapoints	Datasets	Datapoints	Datasets
Bank Lending	<ul style="list-style-type: none"> • Annual flow: • Total stock: 		<ul style="list-style-type: none"> • Loan approvals integrate climate risk 	
Bond Markets				
Listed Equity				
Private Equity				
Insurance				
Assets under Management				
Financial services				



Bank Lending

- Annual bank lending to climate-related projects/corporations
- Total stock of climate-related loans outstanding and matured
- Qualitative datasets on level of integration into loan approvals across banking sector

	Quantitative Flows		Qualitative Processes	
	Datapoints	Datasets	Datapoints	Datasets
Bank Lending	<ul style="list-style-type: none"> • Annual flow: \$42 billion and \$70 billion in green loans 2015/2016 • Annual flow: \$165 billion or 15% of total new loans 	Bloomberg IFC based on Thomson Reuters	<ul style="list-style-type: none"> • 49% of major banks applying climate risk assessments (47 sample) 	Boston Common AM

Bond markets

- Annual climate-related bond issuance against total annual bond issuance (in % or US\$ amounts)
- Total stock of outstanding and matured climate-related bond issuances
- Qualitative datasets on level of integration into bond issuance processes, listings and documentation

	Quantitative Flows		Qualitative Processes	
	Datapoints	Datasets	Datapoints	Datasets
Bond markets	<ul style="list-style-type: none"> • <i>Annual flow:</i> \$98.3 billion in green bonds 2016. 2.32% of total bonds issued • <i>Total stock:</i> \$221 - \$895 billion of bonds outstanding. 1%-4% of total bonds outstanding 	Bloomberg Climate Bonds Initiative BIS	<ul style="list-style-type: none"> • 11 out of 82 exchanges include green bond listing processes (13.4%) by end of 2017 	SSE (We Mean Business)

Listed Equity

- Annual climate-related initial public offerings (IPOs) or common stock offerings
- Total market capitalization of climate-related stocks
- Total climate-related indices market capitalization, performance against benchmark
- Qualitative datasets on level of integration into stock exchange processes, listings, disclosure etc.
- On level of integration into stock market indices

	Quantitative Flows		Qualitative Processes	
	Datapoints	Datasets	Datapoints	Datasets
Listed Equity	<ul style="list-style-type: none"> • <i>Annual flow:</i> \$8.7 billion in clean energy IPO in 2016. • <i>Total stock:</i> 6% of market cap committed to adopt a Science-based Target in line with 2- degree pathways 	<p>BNEF</p> <p>We Mean Business</p>	<ul style="list-style-type: none"> • 68% of market cap on SSEs • 11% on exchange with ESG listing rules • 81% on SSE with sustainability indices available. • 4% support TCFD recommendations 	<p>SSE (We Mean Business)</p>

Private Equity

- Annual private equity investment into climate-related funds, projects or corporations against total annual private equity investments.
- Total value of climate-related private equity funds outstanding and matured.

	Quantitative Flows		Qualitative Processes	
	Datapoints	Datasets	Datapoints	Datasets
Private Equity	<ul style="list-style-type: none"> • <i>Annual flow:</i> \$10 billion and \$13.6 billion in VC/PE flows in 2015 and 2016 in clean energy 	BNEF EMPEA forthcoming		



Insurance and Reinsurance

- Annual new insurance written addressing climate-related risks against total value of new insurance written.
- Total value of insurance portfolios addressing climate-related risks
- Qualitative datasets on level of integration into insurance provision processes.

	Quantitative Flows		Qualitative Processes	
	Datapoints	Datasets	Datapoints	Datasets
Insurance and Reinsurance	<ul style="list-style-type: none"> • <i>Annual flow:</i> Total direct premiums written \$4.7 trillion in 2016. No climate-related data. 	SwissRe Institute	<ul style="list-style-type: none"> • 48% of insurers (1174 sample) have a climate change policy in 2016 • 16% of insurers (148 sample) score High Quality rating 	California Dept. of Insurance Ceres

Assets under Management

- Datasets on asset allocation to climate-related assets in new annual commitments and/or total announced allocations
- Qualitative datasets on level of integration into asset allocation or investment decision-making processes and disclosure

	Quantitative Flows		Qualitative Processes	
	Datapoints	Datasets	Datapoints	Datasets
Assets under Management	<ul style="list-style-type: none"> • <i>Annual flow:</i> \$2 trillion disclosed low carbon investment in 2016 out of 500 sample 	<ul style="list-style-type: none"> AODP PRI forthcoming 	<ul style="list-style-type: none"> • 17% of asset owners and 19% of asset managers incorporate climate change into asset allocation decisions. (223 and 587 sample) 	<ul style="list-style-type: none"> AODP UNPRI UNEP FI Ceres



Financial Services

- Datasets on number of credit rating decisions based on climate change considerations
- Qualitative dataset on level of integration into investment consultant services
- Qualitative dataset on level of integration into credit rating

	Quantitative Flows		Qualitative Processes	
	Datapoints	Datasets	Datapoints	Datasets
Financial services	<ul style="list-style-type: none"> • <i>Annual flow:</i> 717 out of 900 where environmental and climate concerns were relevant to rating; 106 cases where the concern resulted in change to outlook or rating. 	S&P	<ul style="list-style-type: none"> • 2 out of 3 major credit rating agencies reported to have made progress in complementing rating analysis with ESG to refine and improve methodologies 	UN PRI

Questions for comments and feedback

- Feedback on logical approach for incorporating 2.1 c into BA
- Feedback on framework for mapping datasets
- Comments on specific data referenced
 - a) Bank lending
 - b) Bond markets
 - c) Listed equity
 - d) Private equity
 - e) Insurance and Reinsurance
 - f) Assets under management
 - g) Financial services



How Chapter 3 presents thinking on article 2.1.c

3.5.1. Alignment of international financial flows with low-carbon, climate resilient economies

- Public finance flows including ODA, OOF (ECA) and MDB flows
- Composition and drivers of FDI flows

3.5.2. Alignment of domestic finance flows with low-carbon, climate resilient economies

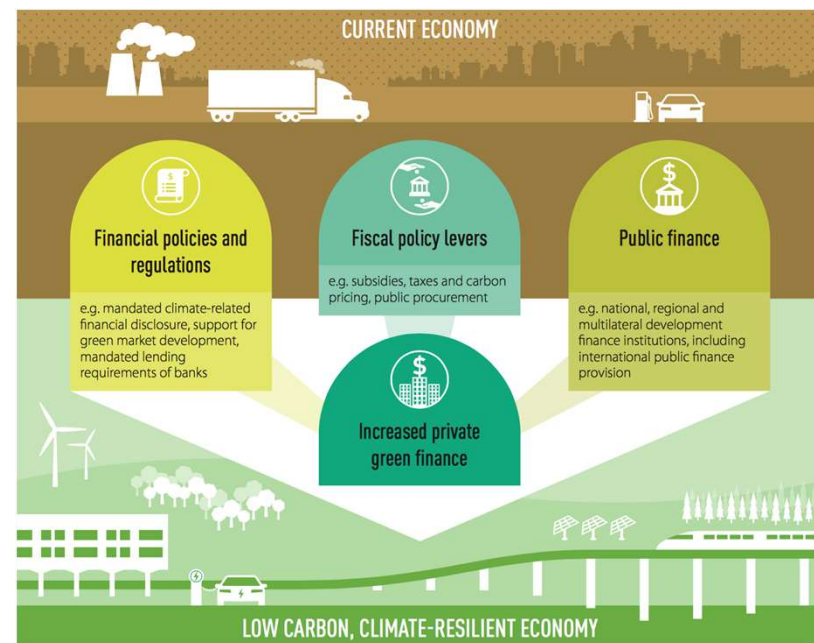
- Fiscal policy and public finance
- Monetary policy
- Mandatory and voluntary regulations



The need to develop a common, usable understanding of 2.1.c

- ‘Aligning financial flows’ does not mean all flows have to deliver climate benefits
- Differing perspectives on how to start conversations, e.g.
 - ❑ A systematic view across financial flows in financial markets
 - ❑ A sources perspective such as international and domestic flows
 - ❑ A focus on public actors and actions to finance a transition from brown to green

e.g. [Climate Transparency](#)



Comments and thoughts on developing a 'mental map' for 2.1.c.

- What gaps in content are there in the current structure for chapter 3?
- What guiding perspectives would make the 'mental map' useful in the BA context (e.g. in respect to scope, coverage, availability of data) and/or more broadly?
- Are there other existing or suggested mental maps that can be discussed, collated and consolidated to create a BA articulation of article 2.1.c?

