

**CLIMATE PUBLIC EXPENDITURE AND INVESTMENT REVIEW (CPEIR) –
PERIOD 2010-2020 – MINISTRY OF TRANSPORT (MOT)**

1. General Introduction

Vietnam's transport network, which has seen an impressive expansion over the past two decades, is increasingly vulnerable to the intensifying climate hazards. Climate change has caused impacts on transport infrastructure such as landslides, flash floods and flooding of road, railway, damage to railway signal information systems, reduced height clearance, increasing riverbank erosion; increase air service disruptions and delays. Estimated direct damage caused by natural disasters to transport infrastructure in the period 2011 - 2019 is about 15,900 billion VND. It is forecasted that by 2050, if the sea level rises from 18-38 cm, the loss due to climate change could reach 2% of Vietnam's GDP, of which a large proportion is transportation losses.

The Ministry of Transport is a government agency, performing the state management of road, railway, inland waterways, maritime and aviation transportation nationwide. Along with the development of the transport network, the work of environmental protection, response to climate change and sustainable development of transportation is always cared by the Ministry of Transport. The integration of climate change adaptation has been implemented in the plans and a number of investment projects to develop transport infrastructure, especially in the Mekong River Delta, Central, South-Central Coast and other mountainous areas.

2. Sources of total climate change budget

a) Total climate budget 2010 – 2020.

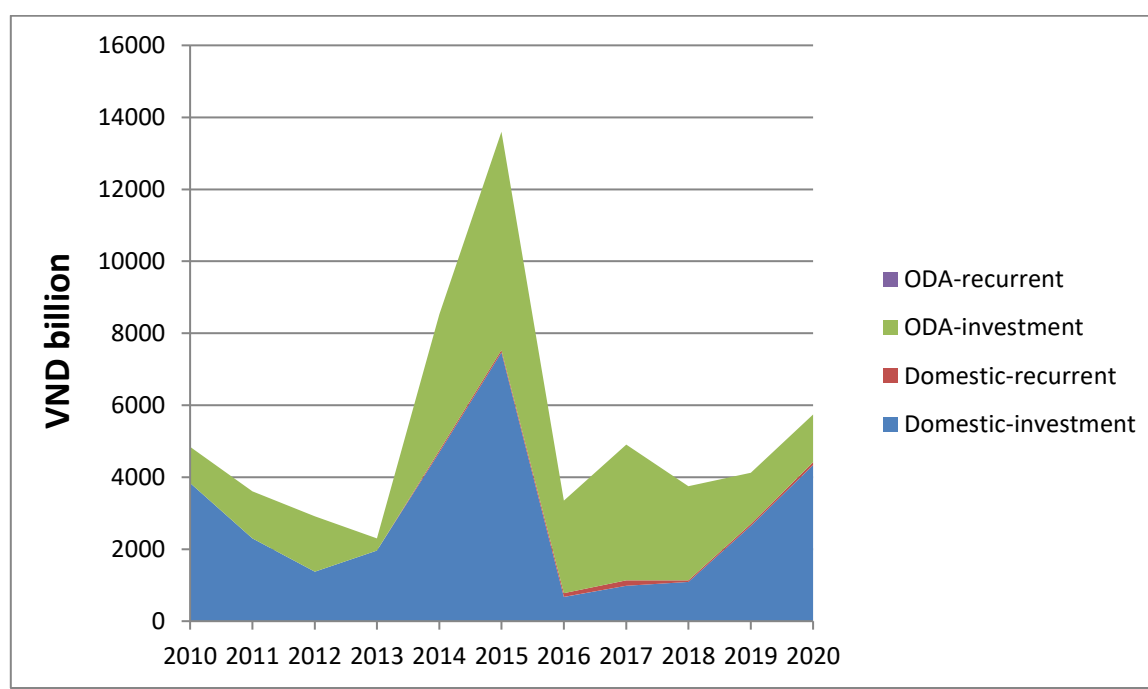


Figure 1: Total climate change budget expenditure for Ministry of Transport 2010 - 2020 (at 2020 constant price; data for domestic recurrent expenditures starts in 2014)

- Investment spending makes up most of the climate change budget. The average investment spending on climate change is about 6,206 billion VND/year, with the highest in 2015 (13,533 billion VND), while the lowest was in 2013 (2,303 billion VND). The investment budgets from both domestic and recurrent has high annual variability.

- The annual contribution of investment is split evenly between domestic and ODA sources (50% each). However, due to high annual variability the proportion of ODA investment varies significantly between the years, the lowest is 14.7% in 2013 but 79.4% in 2017.
- Recurrent expenditures are always small, less than 1% investment expenditures, with annual average domestic expenditure on climate change recurrent of just 80 billion VND (2014 - 2020). For the 2014 - 2020 period recurrent budget is only from the domestic source, and not ODA (no data was available on domestic recurrent budget prior to 2014).

Table 1. Total climate change expenditure in MOT (2020's price)

	Domestic investment	ODA investment	Domestic recurrent	ODA recurrent
2010	3840.488	1003.537	0	0
2011	2303.971	1302.110	0	0
2012	1375.816	1539.738	0	0
2013	1965.421	338.030	0	0
2014	4692.088	3778.587	54.102	0
2015	7468.779	6064.689	65.925	0
2016	675.075	2572.904	102.476	0
2017	980.809	3773.224	155.265	0
2018	1094.269	2615.264	43.998	0
2019	2646.612	1420.053	54.805	0
2020	4334.073	1326.403	80.699	0

b) The total climate change budget as a percentage of the total Ministry budget from 2010 – 2020.

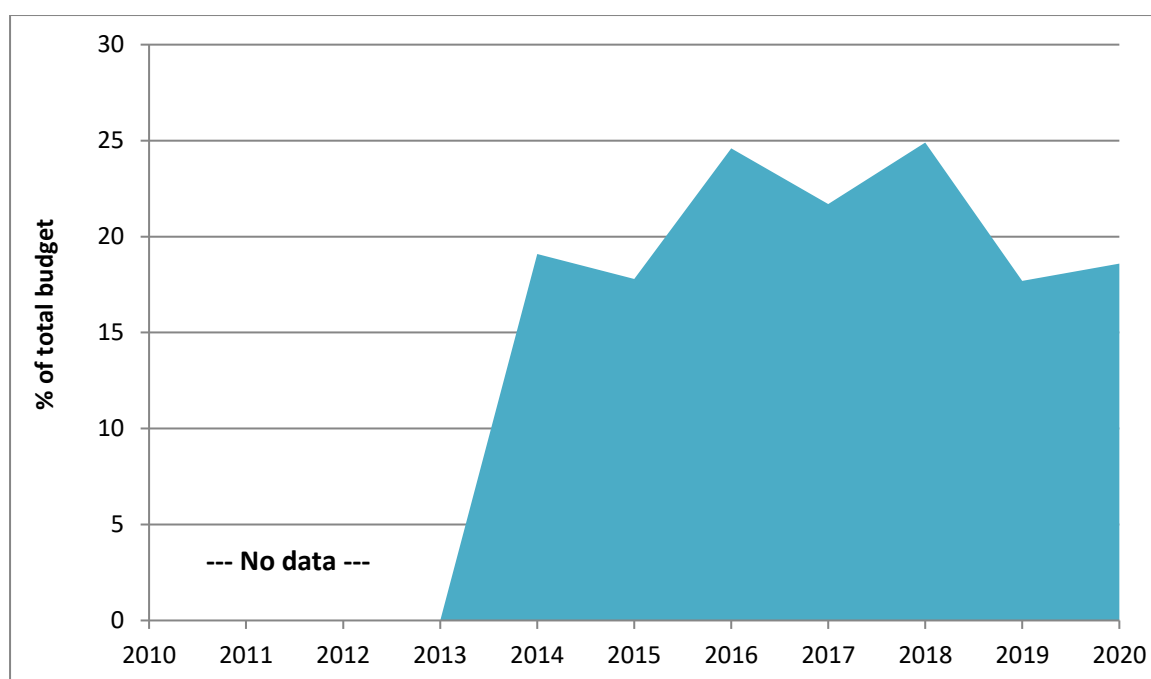


Figure 2: Ratio of budget expenditure on climate change to the total provincial budget for the period 2014-2020 (unit: %; full data not available prior to 2014)

The climate budget represents between 18% - 25% of the total MOT budget, averaging 20.5%, for the 2014 - 2020 period. In 2018, the climate investment budget was the highest proportion of the MOT investment budget at 25%, whereas it was lowest at 18% in 2015.

Table 2: Share of climate budget expenditure in total ministry's annual budget

	Total CC budget	Total Ministry Budget	% of total budget
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2010	4844.025	-	-
2011	3606.081	-	-
2012	2915.554	-	-
2013	2303.451	-	-
2014	8524.777	44613.23	19.1
2015	13599.39	76523.89	17.8
2016	3350.455	13598.77	24.6
2017	4909.298	22653.00	21.7
2018	3753.531	15076.80	24.9
2019	4121.47	23297.40	17.7
2020	5741.175	30912.79	18.6

3. Purpose of total climate change budget

Allocation of total climate change budget to adaptation and mitigation:

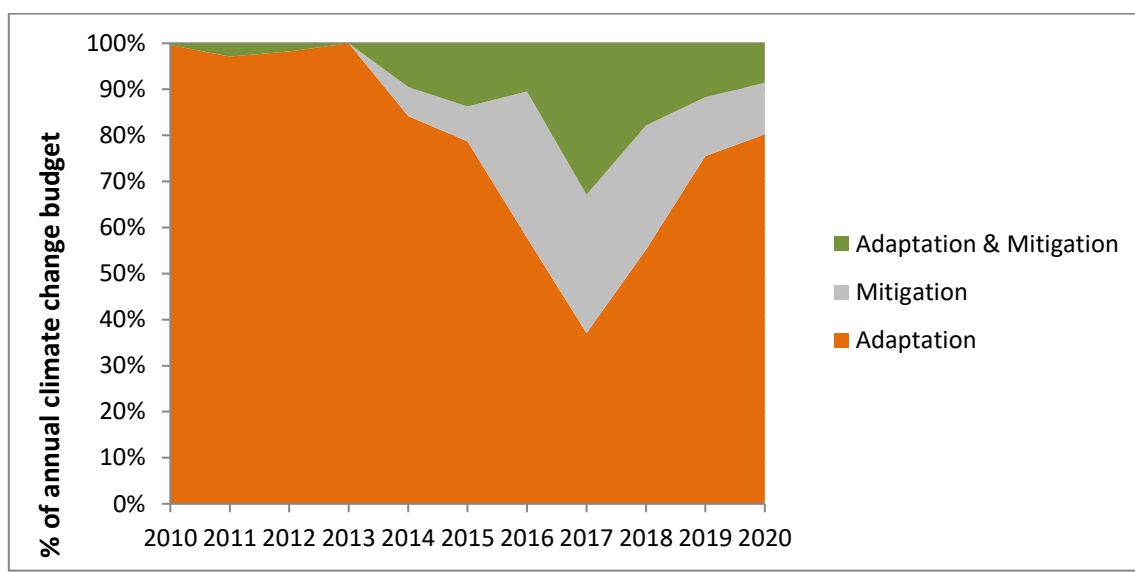


Figure 3: Conceptual distribution of public spending on climate change (i.e. categories: adaptation, mitigation, adaptation + mitigation; the chart uses only investment data prior to 2014, but recurrent expenditure is usually <1% of total climate expenditure).

- Total budget in climate change in the 2014 - 2020 period mostly focuses on adaptation. Adaptation represented 74% of total climate budget while mitigation represented 14% and the remaining was for both adaptation and mitigation.
- Until 2013, the focus was on adaptation projects. Since then there has been diversification into mitigation and mixed adaptation and mitigation projects. In 2017, pure adaptation projects represented less than half of the climate budget, however adaptation projects have increased steadily again to represent 80% of the budget in 2020.

Table 3: Distribution of climate change spending by categories of adaptation, mitigation and mixed

	Adaptation		Mitigation		Adaptation & Mitigation	
	Count	%	Count	%	Count	%
2010	4823.953	99.6	0	0	20.071	0.4
2011	3499.7	97.1	0	0	106.351	2.9
2012	2863.547	98.2	0	0	52.007	1.8
2013	2303.451	100.0	0	0	0	0
2014	7179.551	84.2	535.879	6.3	809.347	9.5
2015	10553.268	78.7	1024.965	7.6	1838.895	13.7
2016	1936.15	57.8	1063.999	31.8	350.306	10.5

2017	1818.913	37.1	1475.739	30.1	1614.645	32.9
2018	2071.59	55.2	1015.261	27.0	666.68	17.8
2019	3109.207	75.4	529.59	12.8	482.672	11.7
2020	4609.119	80.3	642.674	11.2	491.168	8.6

4. Allocation of total climate budget to climate change themes

a) Allocation of total climate change budget to pillars:

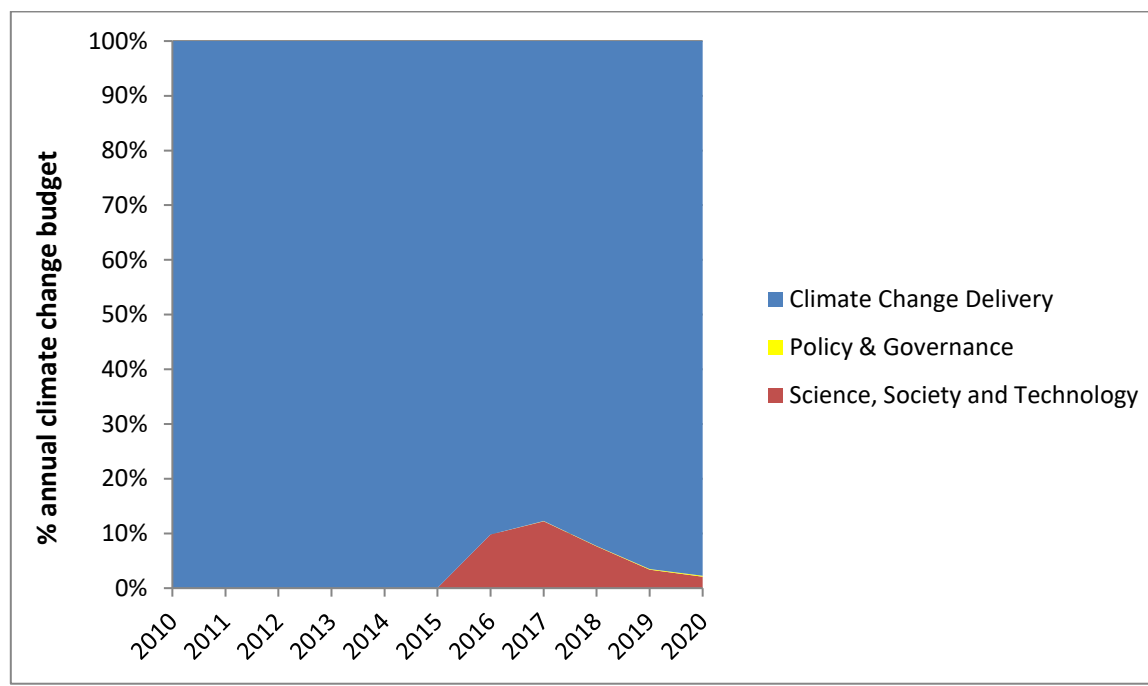


Figure 4: Distribution of public expenditure on climate change - grouped into pillars of Climate Change Delivery (CCD), Science, Society and Technology (ST) and Policy & Governance (PG) (note: recurrent data not available 2010 – 2013, thus ST and PG may be under-represented during this period)

The climate change budget 2010-2020 focuses predominantly on the Climate Change Delivery (CCD) pillar. CCD represented 88% of the climate budget in 2017 but was over 90% for all the remaining years. The remainder of the climate budget was predominately from Science, Society and Technology (ST), with a tiny contribution from Policy & Governance of under 0.2% of the overall climate budget.

CCD budgets mainly came from investment budget while ST and PG mainly came from the recurrent budget.

Table 4: Distribution of public expenditure on climate change by categories of Science and technology, Policy and Governance and Climate Change Delivery

	ST		PG		CCD	
	Count	%	Count	%	Count	%
2010	0	0	0	0	4844.025	100
2011	0	0	0	0	3606.081	100
2012	0	0	0	0	2915.554	100
2013	0	0	0	0	2303.451	100
2014	4.984	0.06	1.186	0.01	8518.607	99.93
2015	5.614	0.04	2.733	0.02	13408.781	99.94
2016	329.461	9.83	0.312	0.01	3020.683	90.16
2017	599.933	12.22	1.536	0.03	4307.829	87.75
2018	286.774	7.64	2.647	0.07	3464.111	92.29
2019	140.082	3.40	3.701	0.09	3977.687	96.51

2020	121.42	2.11	9.807	0.17	5611.734	97.71
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b) Allocation of Climate Change Delivery tasks (annual mean expenditure VND billion, 2014 - 2020):

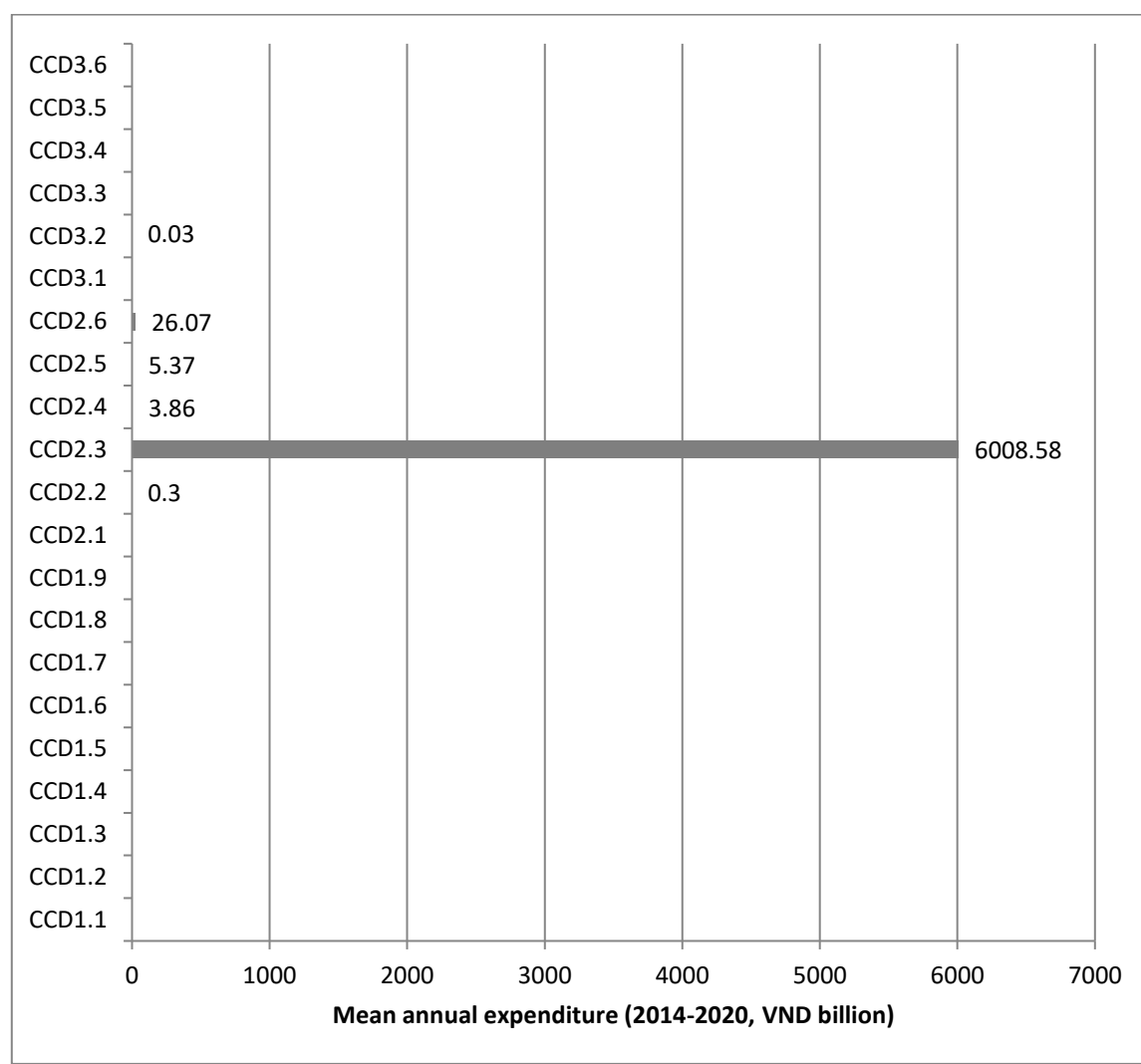


Figure 5: Distribution of public expenditure on climate change with in the (Climate change delivery (CCD) category.

- The expenditures related to CCD from 2014 - 2020 was nearly exclusively on transport infrastructure (CCD2.3), accounting for 99.4% of the CCD budget. Other targets for CCD expenditures were strengthening disaster risk reduction and management (CCD2.6) for 0.4%. Smaller amount of budget were allocated to Disaster and Waste Management (CCD 2.4 and 2.5), each representing about 0.2% of the climate budget.

Table 5: Public expenditure on climate change within the CCD category

CCD1.1	0	CCD1.8	0	CCD2.6	26.07
CCD1.2	0	CCD1.9	0	CCD3.1	0
CCD1.3	0	CCD2.1	0	CCD3.2	0.03
CCD1.4	0	CCD2.2	0.30	CCD3.3	0
CCD1.5	0	CCD2.3	6008.58	CCD3.4	0
CCD1.6	0	CCD2.4	3.86	CCD3.5	0
CCD1.7	0	CCD2.5	5.37	CCD3.6	0

c) Allocation to Science, Society and Technology and to Policy and Governance tasks (annual mean expenditure VND billion, 2014 – 2020):

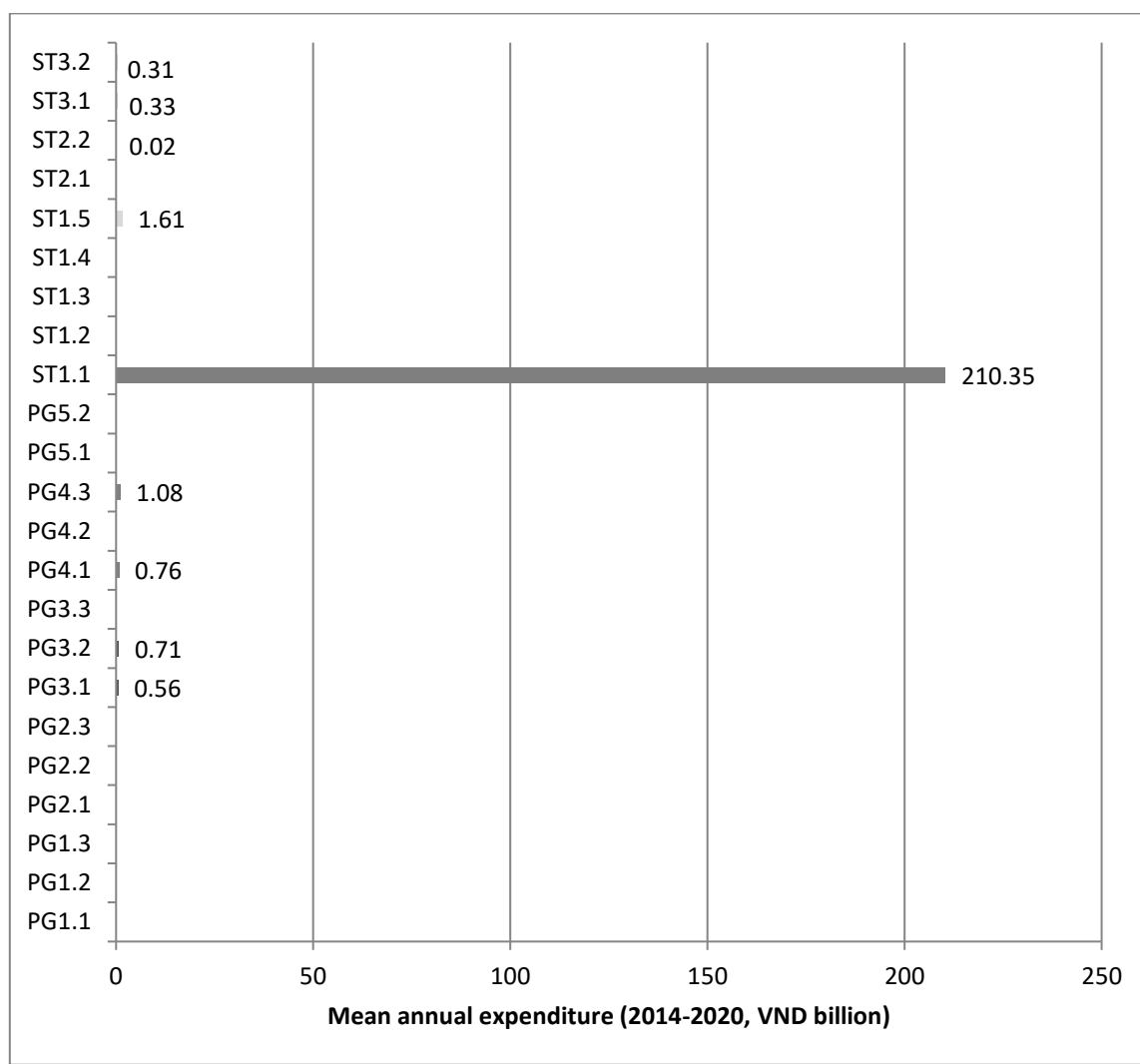


Figure 6. Allocation to Science, Society and Technology and to Policy and Governance tasks (annual mean expenditure VND billion, 2014 - 2020):

- Expenditures related to the ST pillar are much larger than the PG pillar. The main target for 2014-2020 expenditure was Building an information and database (ST1.1) accounting for 97.5% of the ST and PG budget. Further expenditures were made in Technology for energy efficiency and low GHG emissions (ST1.5, 0.7% of PG and ST budget) and Mitigation and Adaptation legislative instruments (PG4.3, 0.5%).
- Small amounts of budget were allocated to the following PG and St tasks: Mitigation legislative instruments (PG4.1, 0.4%), CC Impact assessments (PG3.2, 0.3%), Action and Sector Plans (PG3.1, 0.3%), Capacity in climate change awareness and response in community and civil society leaders (ST3.1, 0.2%) and Capacity across whole community in climate change response (ST3.2, 0.1%).

Table 6: Public expenditure on climate change within the ST and PG categories

PG1.1	0	PG3.3	0	ST1.3	0
PG1.2	0	PG4.1	0.76	ST1.4	0
PG1.3	0	PG4.2	0.02	ST1.5	1.61
PG2.1	0	PG4.3	1.08	ST2.1	0
PG2.2	0	PG5.1	0	ST2.2	0.02
PG2.3	0	PG5.2	0	ST3.1	0.33
PG3.1	0.56	ST1.1	210.35	ST3.2	0.31
PG3.2	0.71	ST1.2	0		

5. Overseas Development Assistance climate programmes

Estimated contribution of ODA to total climate change budget (average 2010 - 2020):	44.7%
Five largest ODA allocations in terms of climate budget: 1. Project on connecting central areas of the Mekong Delta Region (2012-2020, 17.7%) 2. Ha Noi urban railway: Cat Linh - Ha Dong line (2015-2020, 16.4%) 3. LRAMP (2017-2020, 7.1%) 4. Noi Bai - Lao Cai Expressway (2014-2015, 2019-2020, 4.9%) 5. Development of transport infrastructure in the Mekong Delta (WB5): (2010, 2015-2019, 3.1%)	

6. Policy and planning instruments

Instrument	Yes (✓) or No (X)
Climate Change Action Plan	X
Green Growth Action Plan	✓
Plan for Implementation of Paris Agreement	✓
Others: none	