

CLIMATE PUBLIC EXPENDITURE AND INVESTMENT REVIEW (CPEIR) –

PERIOD 2010-2020 – MINISTRY OF INDUSTRY AND TRADE (MOIT)

1. General introduction

The Ministry of Industry and Trade (MOIT) is a government agency, performing the state management of industry and trade, including the sectors and fields: electricity, coal, oil and gas, new energy, renewable energy, and chemistry. substances and explosives industry, mechanical industry, metallurgy, mining and mineral processing industry, consumer industry, food industry, supporting industry, environmental industry, industry high technology; industrial clusters, handicraft industries, industrial promotion; domestic trade; import and export, border trade; developing overseas markets; market management; promotion; ecommerce; commercial services; international economic integration; competition, consumer rights protection, trade defence; and other delegated public services.

The MOITs mandates and function have been defined in Decree No. 87/2017/ND-CP dated August 18, 2017. As a ministerial agency the MOIT is responsible for drafting laws, resolutions, decrees, policies and plans and programs to submit to competent agencies, issuing guiding circulars and other policies within its competent authority, and communicating with the public to disseminate information on relevant legal framework, and monitoring law compliance. Apart from that, the MOIT has been assigned specific state administration responsibilities on different aspects relevant to legally binding mandates as mentioned above. The activities to respond to climate change in the MOIT are mainly on the field of climate change mitigation and energy saving.

On the field of energy including electricity, coal, oil and gas, new energy, renewable energy and other energies, the MOIT's mandate has been defined in the Article 2 (Item 6) of the Decree. In which, the MOIT is responsible for promoting economical and efficient use of energy and exploring new sources of environmentally friendly energy.

Regarding the main activities in response to climate change, the MOC has involved in implementing the (National) Targeted Program of Vietnam Energy Efficiency (VNEEP) in three phases: 2016-2010 period (VNEEP1), 2012-2015 (VNEEP 2) and 2019-2030 (VNEEP 3). The VNEEP implements synchronously activities in the field of economical and efficient use of energy, showing commitments of all levels of government, associations, businesses, organizations, individuals to energy efficiency in particular and to climate change resilience and environmental protection in general. Specifically, the MOC has completed the following key activities:

1. Implementing initiatives and solution for energy consumption savings in subsectors, industrial parks;
2. Reducing power loss and the average energy consumption for the industrial sectors/subsectors.
3. Introducing modern energy management system
4. Providing training and dissemination activities on efficient energy use in production and domestic consumption;
5. Providing certificates for good compliance
6. Building up energy data center for Vietnam.

2. Sources of total climate change budget

a) Total climate budget 2010 – 2020.

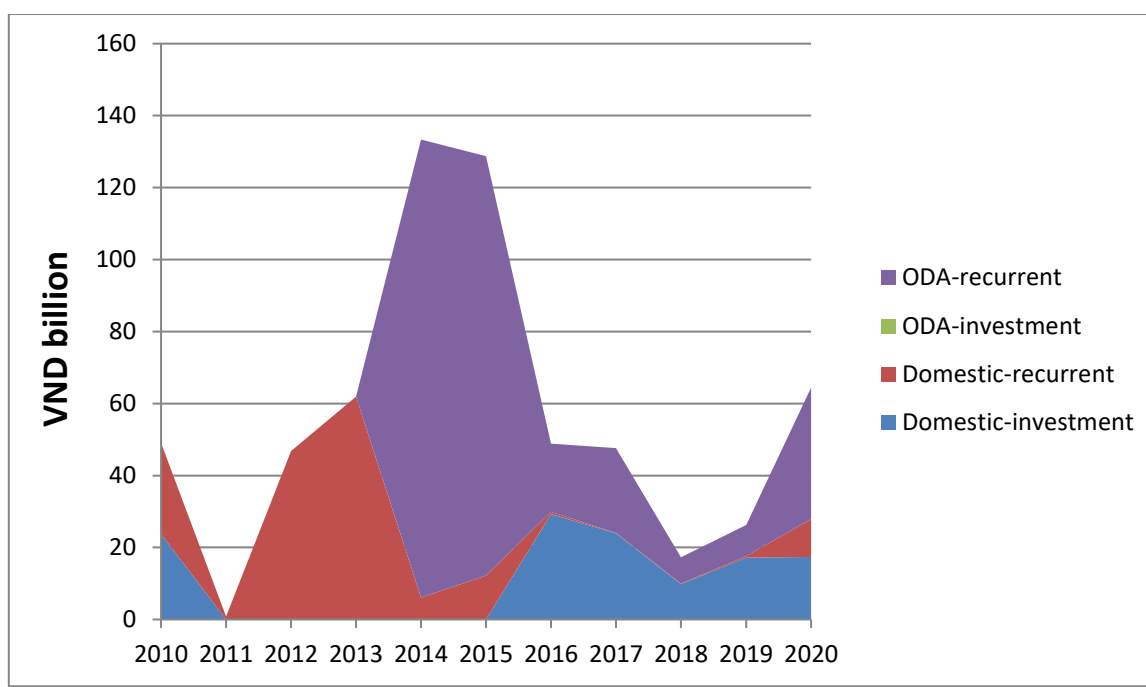


Figure 1: Total climate change budget expenditure in MOIT - includes investment expenditure, recurrent expenditure; from domestic sources and ODA (at 2020's constant prices)

Data limitation: The dataset for MOIT has been consolidated from the previous dataset collected for the last CPEIR report (2010-2013) and the current one (as collected in response to the Ministry of Planning and Investment' official letter No. 8425/BKHDT-KHGDTNMT dated 12/11/2019). Caution should be taken in analysing the data because:

- Both capital and recurrent expenditure data are selectively collected by the authorised agencies from the bunk of the capital and recurrent activities. Thus, other activities, which may be relevant to climate change to some extent may be left out if the agencies' perceived them as irrelevant during the selection process.
- The dataset for capital expenditure in 2010-2013 showed only a few relevant projects in 2010. Investment expenditures in 2011-2013 are missing without note.
- Investment and recurrent expenditure in each year is just a sum of total funding amounts of projects and activities being already listed, rather than the actual ministry's yearly total spending.

From the available dataset, the following observation can be made:

- The average investment spending on climate change is about VND 11 billion/year and for the recurrent expenditure is about VND 46 billion/year, because ODA recurrent expenditure accounted for very large share of total recurrent budget. Capital expenditure in the whole period is only from the domestic budget, not from ODA. The investment budget for climate is highest in 2016 (nearly VND 30 billion), while the lowest in 2018 (VND 9.8 billion). In 2014 – 2015 period, there was no ongoing project related to climate changes because some approved projects did not get funding in those two years. In 2016, new Medium-Term Public Investment Plan was approved, and new investment projects were implemented. In 2020, no new project is initiated, only one ongoing project continued from 2018 to 2019 and 2020.
- The recurrent budget for climate is quite large in some years and felt sharply in the others. The largest budget is in 2014 (VND 133 billion, in which only ODA recurrent budget was larger than any annual investment budget in the study period), and the lowest in 2011 (less than VND 1 billion).
- The annual average domestic expenditure on climate change recurrent is VND 15 billion, accounting for 33% of the total recurrent spending, while ODA contributes to VND 31 billion per year in average accounting for 67%. The proportion of ODA recurrent varies across the years, the lowest is VND 7.3

billion in 2018 (excluding years where ODA data is not available), but VND 37 billion in 2020. Just taking a single National Targeted Program on Economical and Efficient Use of Energy for the period 2019 - 2030 (VNEEP3), the planned budget in 2020 was VND 37,400 billion (domestic VND 10 billion and ODA VND 27,400 billion), 100% of which was relevant to climate change mitigation.

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

	Domestic investment	ODA investment	Domestic recurrent	ODA recurrent
2010	23.751	0	25.268	0
2011	0	0	0.857	0
2012	0	0	46.780	0
2013	0	0	61.906	0
2014	0	0	6.065	127.291
2015	0	0	12.180	116.525
2016	29.253	0	0.674	18.972
2017	23.927	0	0.137	23.577
2018	9.836	0	0.135	7.300
2019	17.213	0	0.399	8.638
2020	17.400	0	10.478	36.566

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

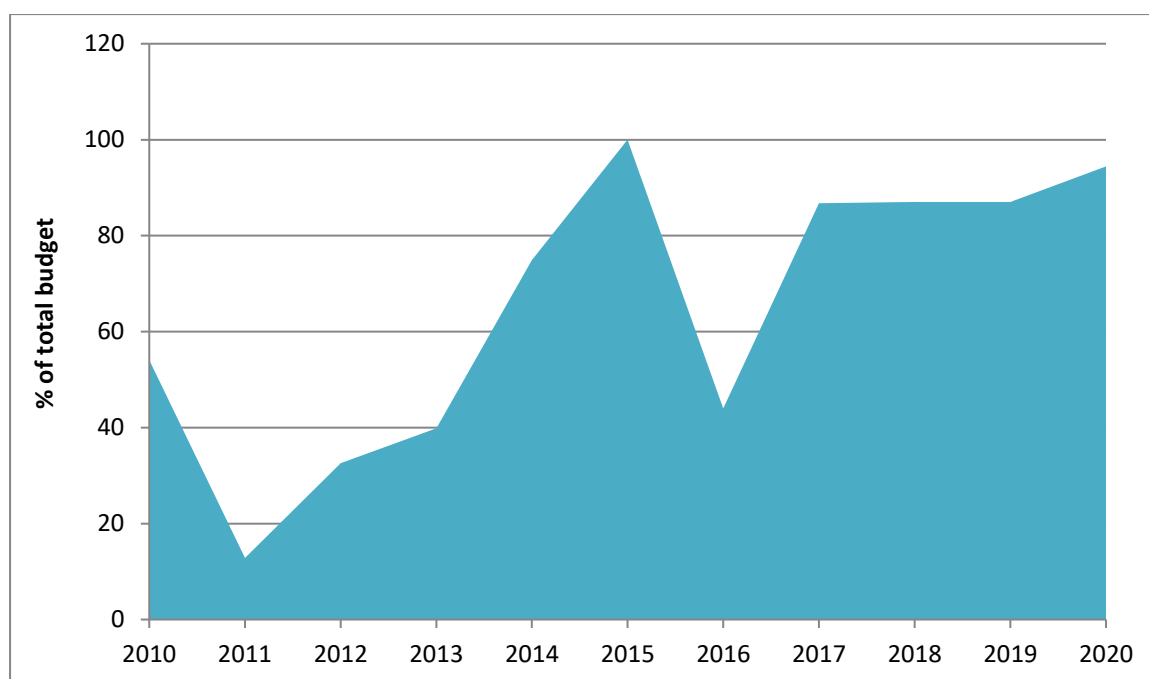


Figure 2: Ratio of budget expenditure on climate change to the total provincial budget for the period 2010-2020 (unit: %)

- The graph shows that the climate budget varies substantially across years. In 2011, relevance of the project portfolio to climate change was lowest, so that climate expenditure accounted for only a modest share of 12.8% of total portfolio budget. By contrast, in such years as 2015 and 2020, the project portfolio was nearly, or fully, relevant to climate change, resulting in over 85% from over 2015 onwards (except 2016). Again, one should be aware that the term “total ministerial budget” in fact is just total funding of all

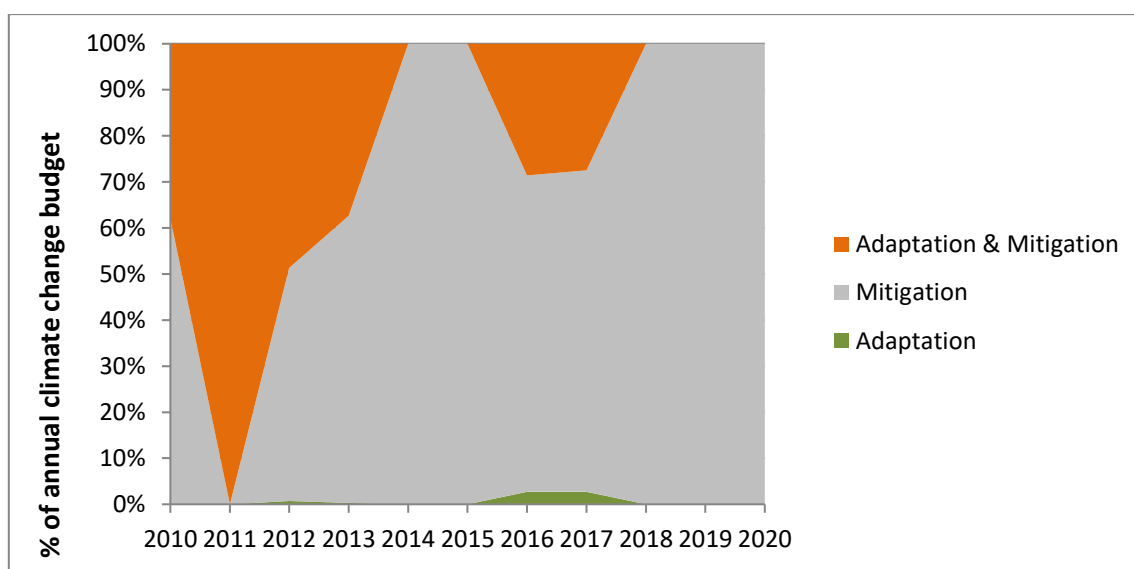
projects being taken into this study, so the percentages shown in this graph are overestimating the actual share of climate expenditure in MOIT's total budget¹.

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

	Total CC budget	Total Ministerial Budget	% of total budget
2010	49.019	90.64	54.08
2011	0.857	6.69	12.81
2012	46.78	143.44	32.61
2013	61.906	155.41	39.83
2014	133.356	178.09	74.88
2015	128.705	128.705	100.00
2016	48.899	111.17	43.99
2017	47.641	54.92	86.75
2018	17.271	19.85	87.01
2019	26.25	30.17	87.01
2020	64.444	68.24	94.44

3. Purpose of total climate change budget

Allocation of total climate change budget to adaptation and mitigation



- Mitigation has overwhelmingly dominated in total budget in climate change in the 2014-2020 period with its share of 84.7% of climate budget in 2010-2020 period. Typically in such years as 2014-2015 and 2018-2020, 100% of CC-related public expenditure in the MOIT was for mitigation purpose.
- The second largest share in the climate budget was of the Mix of Adaptation and Mitigation category, which accounted for 15%, leaving the share of Adaptation as negligible at 0.5%. Referred to the MOIT's mandate, since the Ministry is in charge of developing new lifestyle with green consumption and energy use saving, its climate change activities are evidently relevant much to mitigation.
- Mitigation projects/activities are paid both by investment and recurrent budget, while only few mixed projects and adaptation projects were funded by investment budget only.

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

	Adaptation		Mitigation		Adaptation & Mitigation	
	Count	%	Count	%	Count	%

¹ For example, in 2015, there was no investment budget allocated to climate change, so total "Ministry" budget is just a sum of budget allocation to climate change related recurrent activities in that year, resulting in 100% expenditure for climate change. In fact, it should be interpreted that all capital budget in that year was spent on non-CC projects.

2010	0	0.0	30.377	62.0	18.641	38.0
2011	0	0.0	0	0.0	0.857	100.0
2012	0.322	0.7	23.684	50.6	22.773	48.7
2013	0.205	0.3	38.586	62.3	23.115	37.3
2014	0	0.0	133.356	100.0	0	0.0
2015	0	0.0	128.705	100.0	0	0.0
2016	1.326	2.7	33.61	68.7	13.963	28.6
2017	1.302	2.7	33.242	69.8	13.097	27.5
2018	0	0.0	17.272	100.0	0	0.0
2019	0	0.0	26.251	100.0	0	0.0
2020	0	0.0	64.445	100.0	0	0.0

4. Allocation of total climate budget to climate change themes

a) Allocation of total climate change budget to pillars

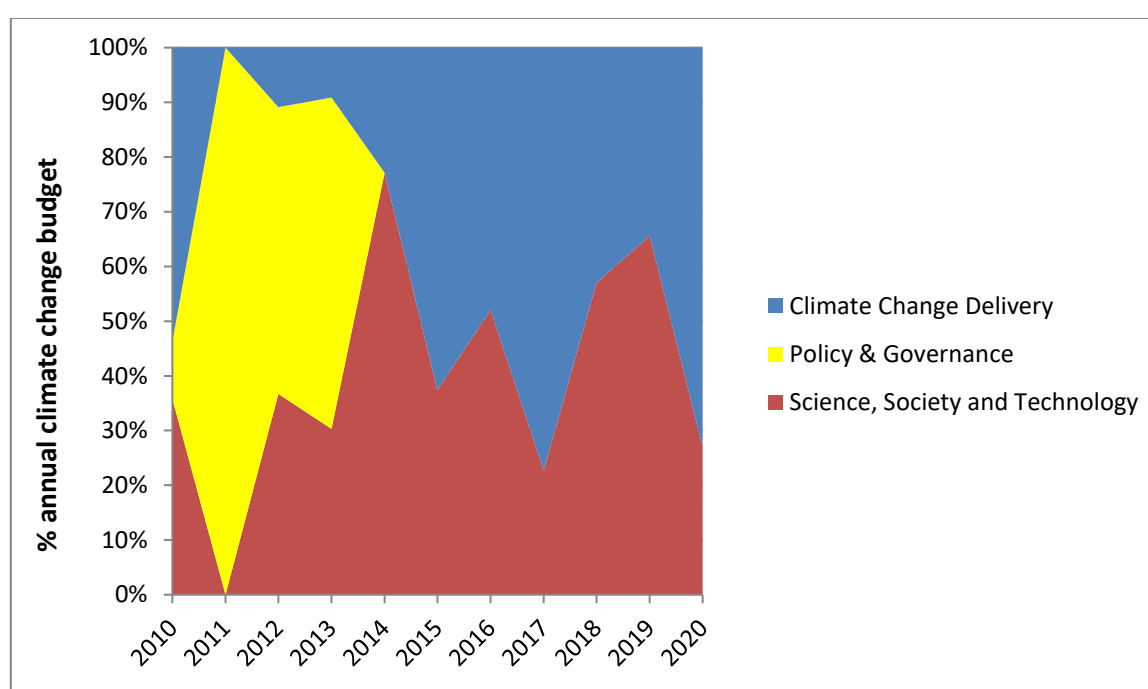


Figure 4: Distribution of public expenditure on climate change – grouped into Investment expenditure (Climate change delivery) and Recurrent expenditure (classified into Science, society and technology and Policy & governance)

- The climate change budget 2010-2020 focuses mostly on ST and CCD. In average, ST was almost 46% of climate budget in this period (when there were four ST projects focusing on low carbon transformation, GHG reduction and energy saving).
- CCD was the largest category, accounting for 44% of total climate budget in the study period. While both CCD and ST projects were funded by both investment and recurrent budget, CCD projects were still dominant in the investment budget. However, the single largest CCD project - National Targeted Program on Economical and Efficient Use of Energy for the period 2019 - 2030 (VNEEP3) was funded from recurrent budget in 2020, bringing the share of CCD category in that year reached 100%.

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	17.555	35.8	5.157	10.5	26.306	53.7

2011	0	0.0	0.857	100.0	0	0.0
2012	17.168	36.7	24.524	52.4	5.087	10.9
2013	18.77	30.3	37.471	60.5	5.664	9.1
2014	102.814	77.1	0	0.0	30.542	22.9
2015	48.134	37.4	0	0.0	80.571	62.6
2016	25.416	52.0	0	0.0	23.483	48.0
2017	10.829	22.7	0	0.0	36.812	77.3
2018	9.836	57.0	0	0.0	7.435	43.0
2019	17.213	65.6	0	0.0	9.038	34.4
2020	17.4	27.0	0	0.0	47.045	73.0

b) Allocation of Climate Change Delivery tasks (annual mean expenditure VND billion, 2010 – 2020):

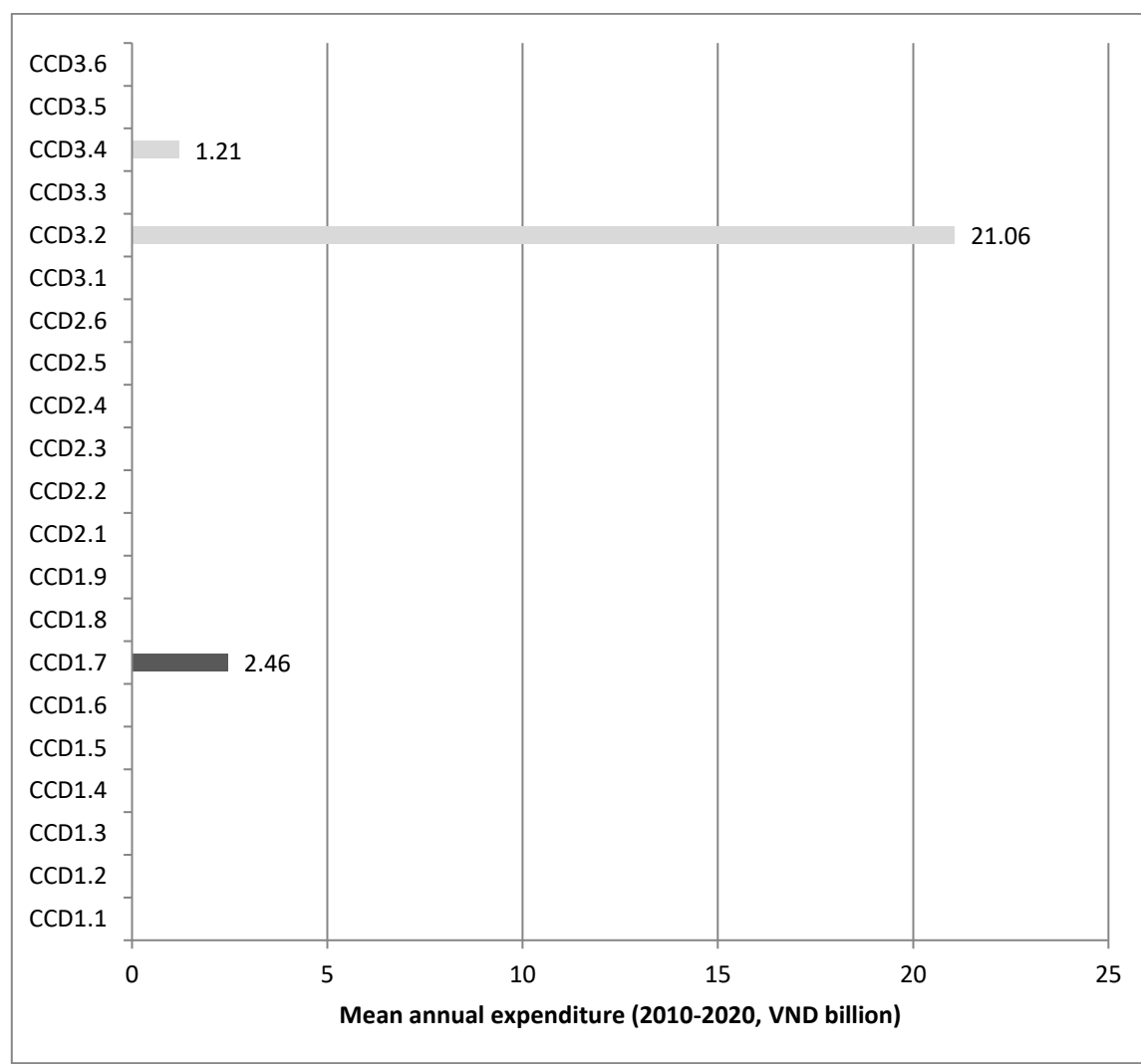


Figure 5: Distribution of public expenditure on climate change within the (Climate change delivery (CCD) category

- Public expenditure on CCD in MOIT concentrated in only three sub-categories of projects.
- The dominant target of climate change from 2010 - 2020 was CCD3.2 (Energy efficiency) accounting for 85% of the CCD budget. Behind CCD 3.2 is Forest development (CCD1.7) for 10% and Industry and Trade (CCD3.4) accounts for 5%.

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

CCD1.1	0	CCD1.8	0	CCD2.6	0
CCD1.2	0	CCD1.9	0	CCD3.1	0

CCD1.3	0	CCD2.1	0	CCD3.2	21.06
CCD1.4	0	CCD2.2	0	CCD3.3	0
CCD1.5	0	CCD2.3	0	CCD3.4	1.21
CCD1.6	0	CCD2.4	0	CCD3.5	0
CCD1.7	2.46	CCD2.5	0	CCD3.6	0

c) Allocation to Science, Society and Technology and to Policy and Governance tasks (annual mean expenditure VND billion, 2010 – 2020):

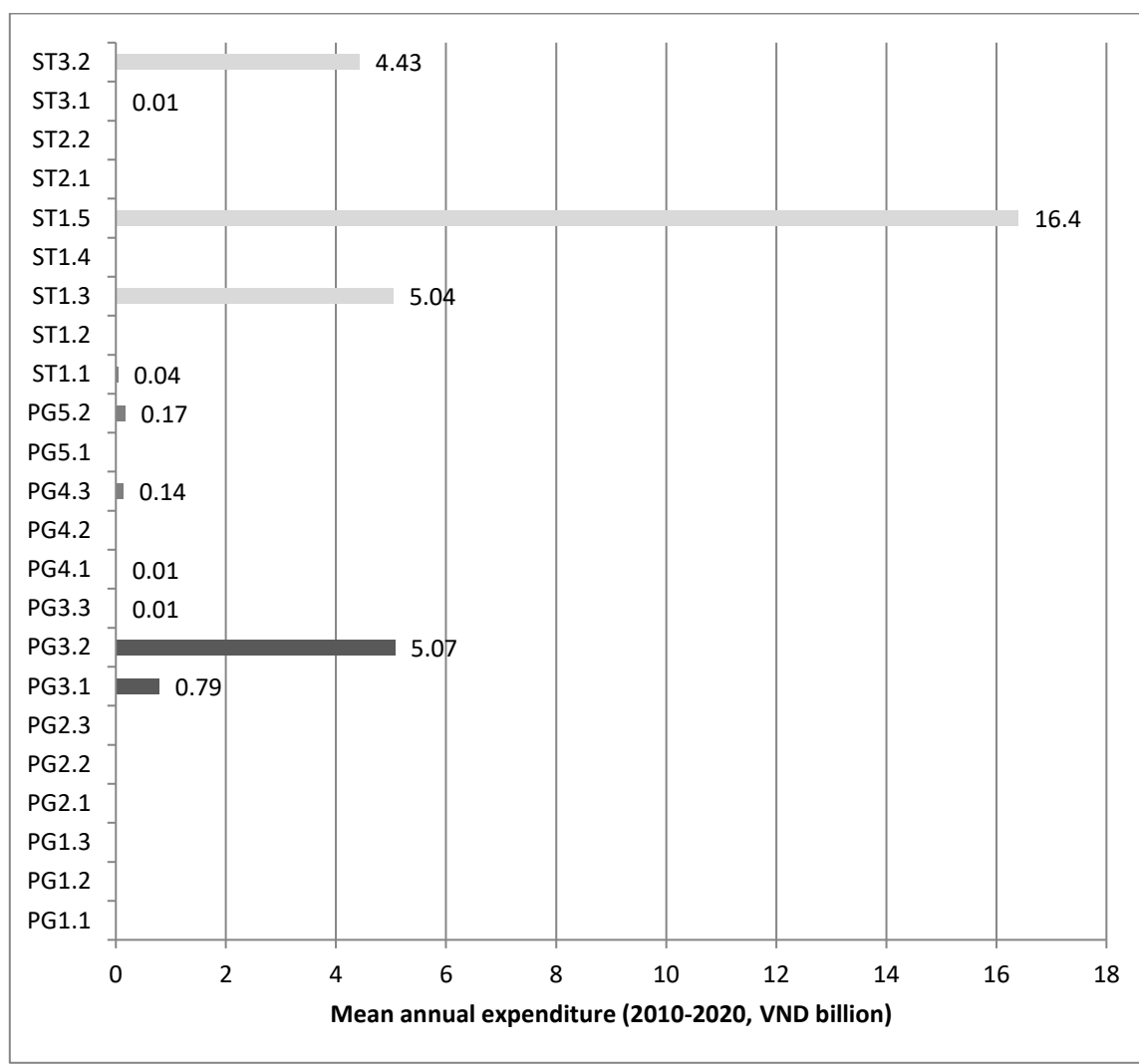


Figure 6: Distribution of public expenditure on climate change within the ST and PG categories

- The main targets of budget in climate change for ST and PG task from 2010 - 2020 has been in Technology for energy efficiency and low GHG emission (ST1.5) accounting for 51% of total budget for ST and PG. CC impact assessment (PG3.2) and Biological & genetic resource strengthening (ST1.3) accounts for 16% respectively, Capacity across whole community in climate change response climate (ST 3.2) accounts for 14%, and Action and Sector Plans (PG 3.1) accounts for 2%.
- Smaller amounts of budget (less than VND 0.5 billion per project in average) have been allocated to, Effective management and coordination of foreign and domestic investment (PG5.2), and Mitigation and Adaptation Instruments (PG 4.3), and Information and database development (ST1.1) among others. Putting together, all small projects and activities accounts for 1% of the total ST and PG budget of the MOIT.

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

PG1.1	0	PG3.3	0.01	ST1.3	5.04
PG1.2	0	PG4.1	0.01	ST1.4	0
PG1.3	0	PG4.2	0	ST1.5	16.40
PG2.1	0	PG4.3	0.14	ST2.1	0
PG2.2	0	PG5.1	0	ST2.2	0
PG2.3	0	PG5.2	0.17	ST3.1	0.01
PG3.1	0.79	ST1.1	0.04	ST3.2	4.43
PG3.2	5.07	ST1.2	0		

5. Overseas Development Assistance climate programmes

Contribution of ODA to total climate change budget (average 2010 –2020):	54.2 %
<p>Five largest ODA allocations in terms of climate budget:</p> <ol style="list-style-type: none"> 1. Project "Promoting energy efficiency in industry through system optimization and energy management standards in Vietnam" (2014-2015, 35.6%) 2. NTP on economical and efficient use of energy ((2014-2015 (VNEEP2) and 2020 (VNEEP 3), 29.5%) 3. Project "Capacity building for Vietnam's industry and trade to control greenhouse gas emissions and strengthen resilience to climate change" (2014-2016, 11.5%) 4. Project "Promoting the use and operation of energy efficient industrial boilers in Vietnam" (2015-2020, 10.1%) 5. Energy savings and cleaner production project (2014, 5.5%) 	

- The outlier Energy Saving, and Cleaner Production in Vietnam Project always took a lead in all dimensions. Again, it is the largest ODA project in the last 10 years. Together with the second largest ODA project - VNEEP 2 – they accounted for 35.6% of total ODA budget for climate change.
- While other ODA projects could not compare with the two largest projects in terms of funding volume, they have shown a clear focus of the MOIT in its climate response activities, that is energy consumption saving and GHE control.

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	X
Others: none	

Green Growth Action Plan (see [table 6 in chapter 1] for nationally defined responsibilities)

Decision 13443/QĐ-BCT of the Minister of Industry and Trade of 8/12/2015 on implementation of the green growth action plan in the Industry and Trade sector 2015-2020, has the following targets:

Targets for emission reduction in the entire industry sector:

- + Reducing the intensity of greenhouse gas emissions in the industry and trade by 8-10% compared to 2010 levels;
- + Reducing energy consumption per unit of product from 1 - 1.5% per year.

Targets to reduce greenhouse gas emissions in some areas:

- + Reduce greenhouse gas emissions in coal-fired thermal power by 10% to 20% compared with normal development plans. In which the voluntary rate is 10%, the extra striving rate with international support is 10%;
- + Reduce greenhouse gas emissions in the field of chemical fertilizer production from 9% to 15% compared to the normal development plan. In which the voluntary rate is about 9%, the level of striving with international support is 6%;
- + Reducing greenhouse gas emissions in the steel manufacturing sector: from 10% to 20% compared to the normal development plan. In which the voluntary rate is about 10%, the extra striving rate with international support is 10%.

Greening production: Restructuring and adjusting industrial development plans in line with green growth and sustainable development; to step up the application of cleaner production, improve the efficiency of energy and resource use, actively innovate technologies, use high technologies and clean and environment-friendly technologies in industrial production; to strive to achieve the following by 2020:

- + The value of products in the high-tech and green-tech industries in industrial and commercial production will be 42-45%;
- + The rate of production and business cases meeting environmental standards is 80%
- + The rate of establishments applying cleaner production reaches 50%;
- + Proportion of production value of industries supporting environmental protection and natural capital enrichment reaches 3 - 4% of total industrial production value.

Plan for Implementation of Paris Agreement (PIPA)

See [table 8 in chapter 1] for nationally defined responsibilities of MOIT for the period until 2020)