



BOOK 2

INSTITUTIONAL ARRANGEMENT FOR CLIMATE RESILIENCE



EDITORIAL BOARD

Advisor

Dr. Ir. Arifin Rudiyanto, M.Sc
Deputy Minister for Marine Affairs
and Natural Resources
The Ministry of National Development
Planning of the Republic of Indonesia
(Bappenas)

Editor-in-Chief

Ir. Medrilzam, M.Prof.Econ, Ph.D
Director of Environment
The Ministry of National Development
Planning of the Republic of Indonesia
(Bappenas)

Executive Editors

Dr. Sudhiani Pratiwi, S.T, M.Sc;
Atik Nurwanda, S.P, M.Si, Ph.D

Editor

Emod Tri Utomo, S.Si.
Pramudita Mahyastuti, S.Si, M.Sc
Swari Farkhah Mufida, S.Si, M.T
Mega Sesotyaningtyas, S.T, M.T
Pradipha Panduswanto, SE, M.E;
Rahadian Febry Maulana, M.T;
Yohanes Ariyanto, S.Si

Graphic Designer

Oki Triono

Supporting Team

Riska Apriyani
Rosib

TABLE OF CONTENTS

Table of Contents	2
List of Figures	2
List of Tables	2
List of Abbreviations	3
1. The Importance of Institutional Arrangement in the Implementation of Climate Resilience	5
2. Mapping of Ministries and Institutions (K/L) & Local Bureaucracy related to Climate Resilience Priority Sectors	6
3. Mapping of Primary Duties and Functions of Ministries and Institutions	18
3.1 Regulatory Framework	18
3.2 Regulations Related to The Marine and Coastal Sector	21
3.3 Regulations Related to Water Sector	21
3.4 Regulations Related to Agriculture Sector	22
3.5 Regulations Related to Health Sector	22
4. Expertise Role in Climate Resilience	23
5. Institutional Coordination Mechanism for the Implementation of Climate Resilience Action	24
6. Closing	27
Appendix	28

LIST OF FIGURES

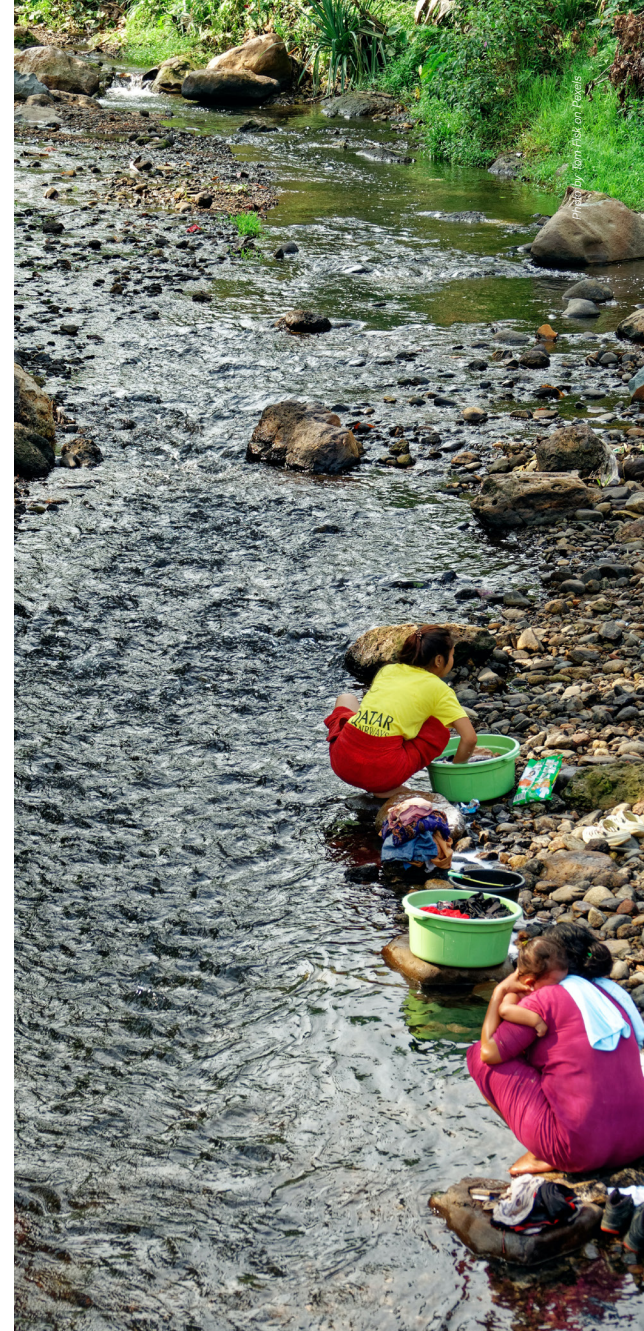
Figure 1. Mapping the Role of Ministries and Institutions (M/I) in the Implementation of Climate Resilience	14
Figure 2. Synchronization of National and Regional Development Planning	16
Figure 3. Climate Resilience Development Regulatory Framework	19
Figure 4. National Development Control Mechanism	20
Figure 5. Climate Resilience Development Coordination Mechanism	25

LIST OF TABLES

Table 1. Role of Ministries/Institutions in Climate Resilience Issues	8
------------------------------------------------------------------------------	----------

LIST OF ABBREVIATIONS

APBD	<i>Anggaran Pendapatan dan Belanja Daerah</i> (Regional Revenue and Expenditure Budget)
APBN	<i>Anggaran Pendapatan dan Belanja Negara</i> (State Revenue and Expenditure Budget)
CRD	Climate Resilience Development
KLHS	<i>Kajian Lingkungan Hidup Strategis</i> (Strategic Environmental Studies)
KSN	<i>Kawasan Strategis Nasional</i> (National Strategic Area)
KSP	<i>Kawasan Strategis Provinsi</i> (Provinces Strategic Area)
KSK	<i>Kawasan Strategis Kabupaten/Kota</i> (Districts/Cities Strategic Area)
K/L	<i>Kementerian dan Lembaga</i> (Ministries/Institutions)
OPD	<i>Organisasi Perangkat Daerah</i> (Local Bureaucracy)
PEP	<i>Pemantauan, Evaluasi, dan Pelaporan</i> (Monitoring, Evaluation, and Reporting)
Perpres	<i>Peraturan Presiden</i> (Presidential Decree)
PP	<i>Peraturan Pemerintah</i> (Government Regulation)
RAPBD	<i>Rancangan Anggaran Pendapatan dan Belanja Daerah</i> (Regional Revenue and Expenditure Budget Plan)
RAPBN	<i>Rancangan Anggaran Pendapatan dan Belanja Negara</i> (State Revenue and Expenditure Budget Plan)
RDTR	<i>Rencana Detil Tata Ruang</i> (Detailed Spatial Plan)
Renja	<i>Rencana Kerja</i> (Work Plan)
Renstra	<i>Rencana Strategis</i> (Strategic Plan)
RKP	<i>Rencana Kerja Pemerintah</i> (Government Work Plan)
RPJMN	<i>Rencana Pembangunan Jangka Menengah Nasional</i> (National Medium-Term Development Plan)
RPJPN	<i>Rencana Pembangunan Jangka Panjang Nasional</i> (National Long-Term Development Plan)
RTR	<i>Rencana Tata Ruang</i> (Spatial Plan)
RTRW	<i>Rencana Tata Ruang Wilayah</i> (Spatial Plans)
SPPN	<i>Sistem Perencanaan Pembangunan Nasional</i> (National Development Planning System)
UU	<i>Undang-undang</i> (Law)





1.

The Importance of Institutional Arrangement in the Implementation of Climate Resilience

Indonesia is one of the many countries that are vulnerable to the impacts of climate change. As part of the commitment to mitigate the potential impacts of climate change, the government makes a preventive response through a series of activities aimed at reducing the level of vulnerability and increasing resilience. There are four (4) priority sectors nationally with a primary focus on climate resilience action, including Marine and Coastal, Water, Agriculture, and Health. Strong institutional roles and synchronization are needed in implementing climate resilience action.

The importance of institutional arrangement in implementing climate resilience, among others, are as follow:

1. The need to appropriately interpret the authority of Ministries and Institutions (M/I) and Local Bureaucracy;
2. The need for synchronization and harmonization of policies and regulations both at national and local levels;
3. The creation of optimized climate resilience planning and action.

Based on the urgency mentioned above and in line with the drafting process of the Climate Resilience Development document, the Ministry of National Development Planning/Bappenas has issued a book on Institutional Arrangement for Climate Resilience. The book is published in parallel with and is an integral part of the Climate Resilience Development document. The book contains an analysis of the roles of Ministries/Institutions and Local Bureaucracy in climate resilience, a review of regulations related to climate resilience, and expertise that plays a role in climate resilience development. The book is a result of a collaborative work involving Ministries/Institutions, Local Bureaucracy, experts, and other related parties.



2.

Mapping of Ministries & Institutions (K/L) and Local Bureaucracy related to Climate Resilience Priority Sectors

Stakeholders who play roles in implementing climate resilience development actions are Ministries/Institutions, Local Bureaucracies, and Non-Governmental Organizations. This book details the roles of Ministries/Institutions and Local Bureaucracies, while the full roles of Non-Governmental Organizations are available in Book 4.

The Roles of Ministries and Institutions (K/L)

There are three Ministries that are cross-sector in the planning, governance and funding; they are the Ministry of National Development Planning/Bappenas, the Ministry of Finance, and the Ministry of Home Affairs.

The roles of the Ministry of National Development Planning/Bappenas are as follow:

1. Policy formulation/decision-maker of climate resilience activities

- Drafting the national development plan.
- Formulating the draft state revenue and expenditure budget.
- Controlling and evaluating the implementation of the development plan.
- The decision-maker in handling urgent and large-scale problems.

2. Think-tank

- Assessing and formulating development planning policies and other policies.
- Strengthening planning capacity at the national and regional levels in creating innovative and creative funding mechanisms.
- Participatory planning in collaboration with universities, professional organizations, and civil society organizations.

3. Coordinator




- Coordination and formulation of the development planning policies; national development strategies; sectoral, cross-sectoral, and cross-regional policy directions; national and regional macroeconomic frameworks; facilities and infrastructure designs; regulatory frameworks, institution and funding; and also monitoring, evaluating, and controlling the implementation of national development.
- Coordination in finding domestic and foreign sources for financing, as well as allocating funds.
- Coordination and synchronization in implementing the national development planning and budgeting policies and preparing the facilities and infrastructure designs.
- Coordination of strategic activities in handling urgent and large-scale problems.



The roles of the Ministry of Finance are formulating technical policies related to budgeting for climate resilience activities and enhancing the accuracy of the tagging mechanism. Meanwhile, the roles of the Ministry of Home Affairs are formulating, stipulating, and implementing the policies on integrating climate resilience actions into the planning, budgeting, and evaluation system of provincial/district/city government development.




Sectoral Ministries/Institutions also play an important role in the implementation of climate resilience development in each priority sector. The government determines the approaches in implementing climate resilience development, which are Infrastructure, Capacity Building, and Governance and Funding. Detailed mapping of the roles of Ministries/Institutions for each priority sector and the approaches to climate resilience action is presented in **Table 1**.


Table 1. The Roles of Ministries/Institutions in Climate Resilience Issues


Agency (K/L)	Climate Resilience Priority Sector	Correlation of the role of Ministries/Institutions with the climate resilience approach			
		Infrastructure	Technology	Capacity Building	Governance & Funding
 <p>Ministry of Public Works and Public Housing</p>	Coastal Sector	Provision and maintenance of primary and supporting infrastructure in reducing the potential risks and impacts of climate change in the coastal sector (physical damage to coastal areas due to destructive force of seawater) in priority locations for climate resilience.	Adoption of appropriate technology products in the provision and maintenance of coastal sector infrastructure to enhance the effectiveness and efficiency of coastal physical protection (hard infrastructure)	-	Formulation, stipulation, and implementation of policies related to climate resilience infrastructure in the coastal sector.
	Water Sector	Provision and maintenance of primary/supporting facilities and infrastructure in encouraging increased water supply for household, agricultural and industrial needs in drought-prone locations.	Adopt suitable technology products in the provision and maintenance of water sector infrastructure to enhance the effectiveness and efficiency of water supply in drought-prone locations.	-	Formulation, stipulation, and implementation of policies related to climate resilience infrastructure in the water sector.
	Agricultural Sector	Provision and maintenance of primary/supporting facilities and infrastructure to promote the productivity of the agricultural sector in drought-prone location	Adopt appropriate technology products in the provision and maintenance of infrastructure in the agricultural sector to enhance the effectiveness and efficiency of the production process, especially for business actors in the agricultural sector who affected by climate change.	-	Formulation, stipulation, and implementation of policies related to adaptive infrastructure to reduce the potential risks and impacts of climate change in the agricultural sector.

Agency (K/L)	Climate Resilience Priority Sector	Correlation of the role of Ministries/Institutions with the climate resilience approach			
		Infrastructure	Technology	Capacity Building	Governance & Funding
 <p>Ministry of Marine Affairs and Fisheries</p>	Marine and Coastal	Provision and maintenance of primary/supporting infrastructure in the marine and coastal sectors that support the reduction of potential risks and impacts of climate change in the marine and coastal sector.	Conducting research and technology development and diffusion of innovation to encourage the adoption of technology in reducing the potential risks and impacts of climate change in the marine and coastal sector.	Conducting technical guidance and supervision as well as disseminating information related to the impacts of climate change on the marine and coastal sector in order to increase the adaptive capacity of agencies, individuals, or groups in the marine and coastal sector.	Formulation, stipulation, and implementation of policies related to efforts in reducing potential risks and impacts of climate change in the marine and coastal sectors. Formulating a funding policy instrument to assist individual businesses and vulnerable groups in the marine and coastal sectors.
 <p>Ministry of Agriculture</p>	Agricultural Sector	Provision of infrastructure to increase the production and productivity of agricultural commodities, especially rice, in drought-prone areas.	Conducting research and development as well as diffusion of innovation to encourage the adoption of technology (climate-smart agriculture) in order to realize the effectiveness and efficiency of agricultural production processes as well as resilience to the dangers of climate change.	Conducting technical guidance and supervision of the provision of agricultural infrastructure and facilities as well as extension and development of human resources in the agricultural sector, especially related to technical knowledge of climate resilience agriculture.	Formulation, stipulation, and implementation of policies on providing agricultural infrastructure and facilities, increasing the production of agricultural commodities, especially rice, in areas affected by climate change.
 <p>Ministry of Health</p>	Health Sector	Provision of infrastructure to improve public health and the environment against the dangers of spreading disease vectors related to climate change.	Conducting research and technology development and encouraging the adoption of technology in the health sector can reduce the level of community pain, especially those caused by disease vectors related to climate change.	Conducting the development and empowerment of human resources in the health field as well as carrying out communication functions (to inform, educate, and influence) to the community to improve a healthy environment, healthy lifestyle, and control of disease vectors related to climate change.	Formulation, stipulation, and implementation of policies on public health, disease prevention and control, health services, pharmaceuticals, and medical devices.

Agency (K/L)	Climate Resilience Priority Sector	Correlation of the role of Ministries/Institutions with the climate resilience approach			
		Infrastructure	Technology	Capacity Building	Governance & Funding
 Ministry of Social Affairs	Marine and Coastal Sector	-	-	-	Formulation, stipulation, and implementation of policies related to adaptive social protection for communities and business actors (individual/groups) working in sectors affected by climate change.
	Water Sector				
	Agricultural Sector				
	Health Sector				
 Ministry of Transportation	Marine Sector	Provision and maintenance of infrastructure in reducing the potential risks and impacts of climate change, especially in shipping activities (sea transportation and fishing).	Conducting technology research and development and encouraging the adoption of technology that can reduce the potential risks of ship accidents due to extreme waves (climate change).	Conducting technical guidance and supervision as well as disseminating information related to the safety and security of shipping activities (sea transportation and fishing) to improve the adaptive capacity of agencies, individuals, or groups to the impacts of climate change on shipping activities.	Formulation of national and technical policies and implementation of policies related to climate change risk reduction of shipping safety and security.

Agency (K/L)	Climate Resilience Priority Sector	Correlation of the role of Ministries/Institutions with the climate resilience approach			
		Infrastructure	Technology	Capacity Building	Governance & Funding
 Ministry of Environment and Forestry	Marine and Coastal Sector	Provision of infrastructure in preserving, conserving, and rehabilitating the coral ecosystem.	Conducting research and development as well as diffusion of innovation in encouraging adoption of technology that helps to maintain environmental quality and reducing the potential risks and impacts of climate change.	Conducting technical guidance and supervision of the implementation of climate change impact control, particularly in encouraging community and other stakeholders involvement in strengthening the adaptation capacity to the potential risks and impacts of climate change, as well as providing recognition of adaptation efforts that can improve welfare at the local level according to territory condition.	Formulation, stipulation, and implementation of policies, as well as coordination and synchronization of the implementation of climate change impact control policies.
	Water Sector	Provision of infrastructure for preservation, conservation, and rehabilitation in water catchment areas to maintain the availability of raw water.			
 Ministry of Village, Development of Disadvantaged Regions, and Transmigration	Marine and Coastal Sector	Provision of rural infrastructure that encourages reduction of the potential risks and impacts of climate change in priority sectors.	-	Rural community empowerment to increase the adaptive capacity of individuals or groups to the impacts of climate change.	Formulation, stipulation and implementation of policies related to rural development and rural areas that promote adaptive capacity of agencies, individuals and groups in villages, in priority sectors affected by climate change.
	Water Sector				
	Agricultural Sector				
	Health Sector				
 Ministry of Women Empowerment and Child Protection	Marine and Coastal Sector	-	-	Performing the function of communication (to inform, educate, and influence) in enhancing the adaptive capacity of individuals and groups to the potential risks and impacts of climate change, especially women, children and vulnerable groups.	Formulation and enactment of policies to protect and encourage capacity building for women, children and vulnerable groups in all priority sectors for climate change adaptation.
	Water Sector				
	Agricultural Sector				
	Health Sector				

Agency (K/L)	Climate Resilience Priority Sector	Correlation of the role of Ministries/Institutions with the climate resilience approach			
		Infrastructure	Technology	Capacity Building	Governance & Funding
 <p>Indonesian Agency for Meteorology, Climatology and Geophysics (BMKG)</p>	Marine and Coastal Sector	Provision and maintenance of infrastructure to improve the quality of climate information services in order to reduce the potential risks and impacts of climate change in all priority sectors.	Conducting research, assessment and technology development to provide fast, accurate and inclusive climate information to reduce the potential risks and impacts of climate change in all priority sectors.	Delivering information to related agencies and parties as well as the public regarding climate change and hydrometeorological disasters to encourage the adaptive capacity of agencies, individuals or groups in all priority sectors.	Formulation, stipulation and implementation of policies, as well as coordination in order to reduce the potential risks and impacts of climate change in all priority sectors.
	Water Sector				
	Agricultural Sector				
	Health Sector				
 <p>Agency for the Assessment and Application of Technology (BPPT)</p>	Marine and Coastal Sector	-	Performing research, assessment, development and technology diffusion, also providing recommendations and services for the application of technology related to reducing the risks and impacts of climate change in the water resources, agricultural, marine and coastal sectors.	-	Formulation, stipulation and implementation of policies, also coordination in the study and application of technology to promote the reduction of risks and impacts of climate change in the water resources, agricultural, marine and coastal sectors.
	Water Sector				
	Agricultural Sector				
 <p>National Disaster Management Agency (BNPB)</p>	Marine and Coastal Sector	-	Establish technological standards that can improve the quality of disaster mitigation and management, especially in relation to hydrometeorological disasters.	Improve the quality of disaster management coordination in a planned, integrated and comprehensive manner, especially those related to hydrometeorological disasters.	Formulation and stipulation disaster management and handling of refugee policies by acting quickly and precisely, at the same time effectively and efficiently, especially in relation to hydrometeorological disasters.
	Water Sector				
	Agricultural Sector				
	Health Sector				

Agency (K/L)	Climate Resilience Priority Sector	Correlation of the role of Ministries/Institutions with the climate resilience approach			
		Infrastructure	Technology	Capacity Building	Governance & Funding
 Indonesian Institute of Science (LIPI)	Marine and Coastal Sector	-	Conducting basic, inter and trans-disciplinary research to promote the reduction of the potential risks and impacts of climate change and to improve the adaptive capacity of agencies/individuals/ groups in sectors affected by climate change.	-	Assessing and formulating policies in the field of scientific research that can promote the reduction of the potential risks and impacts of climate change and increase the adaptive capacity of agencies/ individuals/groups in sectors affected by climate change.
	Water Sector				
	Agricultural Sector				
	Health Sector				

As mentioned above, the result structure of the Ministries/Institutions mapping in the implementation of climate resilience actions, according to the 2020-2024 National Medium-Term Development Plan (RJPMN), PN 6, PP 2 (Presidential Regulation 18/2020), is illustrated in **Figure 1**. The Ministry of Marine Affairs and Fisheries and The Ministry of Transportation play a key role in the Marine and Coastal Sector, the Ministry of Public Works and Public Housing and the Ministry of Environment and Forestry are the keys for Water Sector, whilst the Ministry of Agriculture plays a key role in Agricultural Sector, and the Ministry of Health is the key in Health Sector. Meanwhile, the Ministry of Environment and Forestry is not only a key player in the Water Sector, but also acts as a National Focal Point who is responsible for and communicates with all activities related to the United Nation Framework Convention on Climate Change (UNFCCC) at the national level of States Parties.

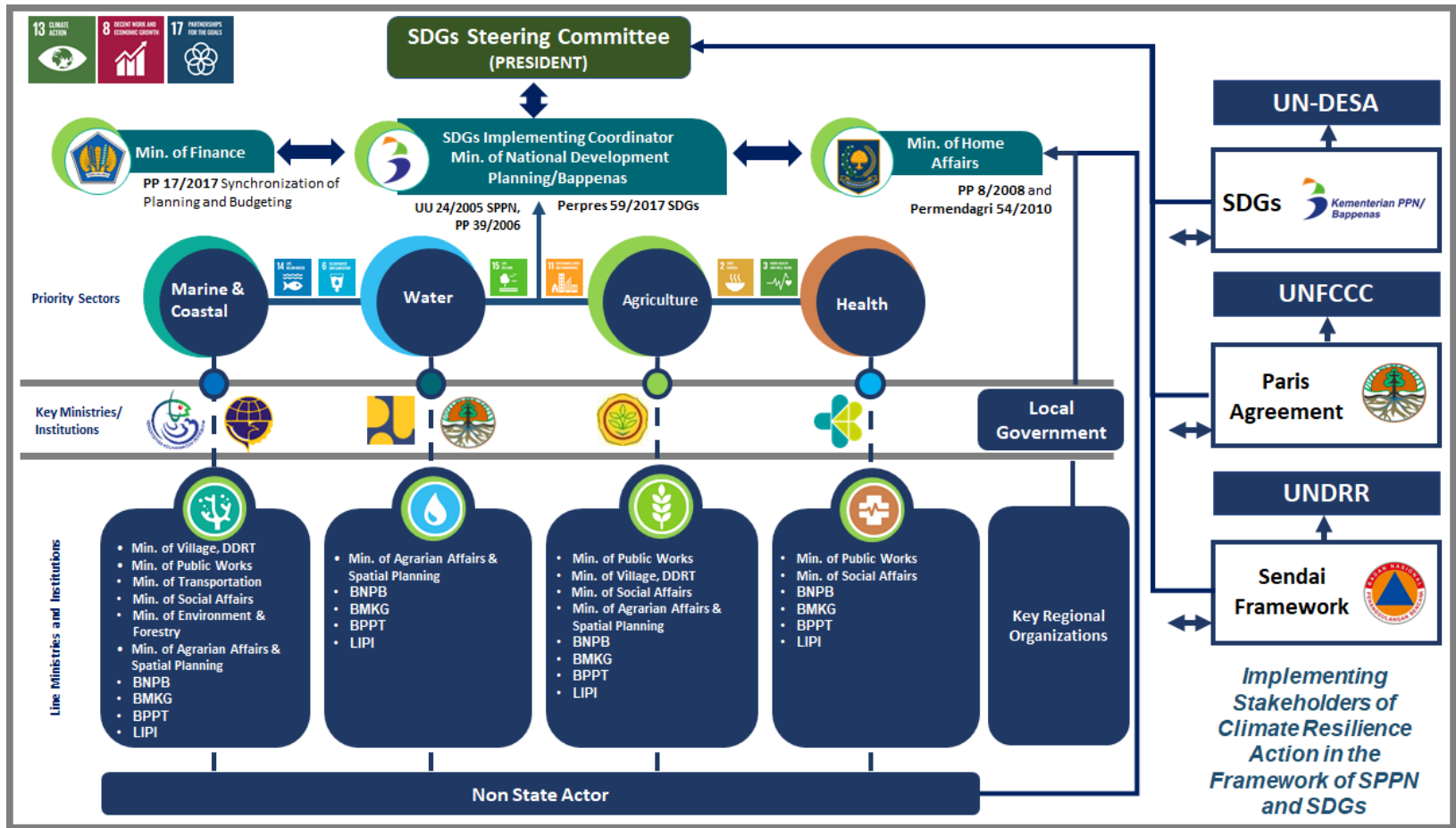


Figure 1. Mapping the Role of Ministries and Institutions (K/L) in the Implementation of Climate Resilience

The Roles of Local Government

The greatest impact of climate change will certainly be felt locally by the affected areas; therefore, local governments need to be actively involved in implementing climate resilience development actions. Law Number 23 of 2014 on Local Government regulates the roles of local governments. This law has been refined twice, the first one was the issuance of Law Number 2 of 2004 regarding the amendment to Law Number 23 of 2014 on Local Government, and the second was the issuance of Law Number 9 of 2015 concerning Second Amendment to Law Number 23 of 2014. Law Number 23 of 2014 and its amendments mention changes in the composition and authority of Local Governments.

The local government authorities include the following:

1.

The local government shall carry out government affairs according to the principle of autonomy and assistance tasks with the principles of the widest possible autonomy in accordance with the system of the Unitary State of the Republic of Indonesia.

2.

The local government carries out concurrent governmental affairs submitted by the central government to become the basis for the implementation of regional autonomy based on the principle of assistance tasks.

3.

The local government is carrying out central government affairs, which is the authority of the president but the implementation is delegated to the governor and regent/mayor, financed by the State Revenue and Expenditure Budget (APBN).

The synchronization/mainstreaming process of PBI with regional planning documents can be done by adopting the synchronization process of national development planning with existing local governments as illustrated in **Figure 2**. Local governments are obliged to prepare a Strategic Environmental Assessment (KLHS) Regional Medium-Term Development Plan (RPJMD) as an integral part of the preparation of the RPJMD document as regulated by the Ministry of Home Affairs Regulation (Permendagri) Number 7 of 2018 in order to adjust the carrying capacity and capacity, taking into account geographical conditions, as well as regional finances. Through the KLHS process, Climate Resilience Development actions can be mainstreamed into Regional RPJM, Regional Strategic Plans (Renstra), and Regional RKP.

Meanwhile, to ensure the effectiveness of development in the regions, the RKPD will be harmonized between the center and the regions as regulated in Permendagri Number 40 of 2020. In addition, Permendagri Number 54 of 2010 and PP Number 8 of 2008 regulates the procedures for the preparation, control and evaluation of the implementation of regional development so that regional planning runs effectively, efficiently and accountably.

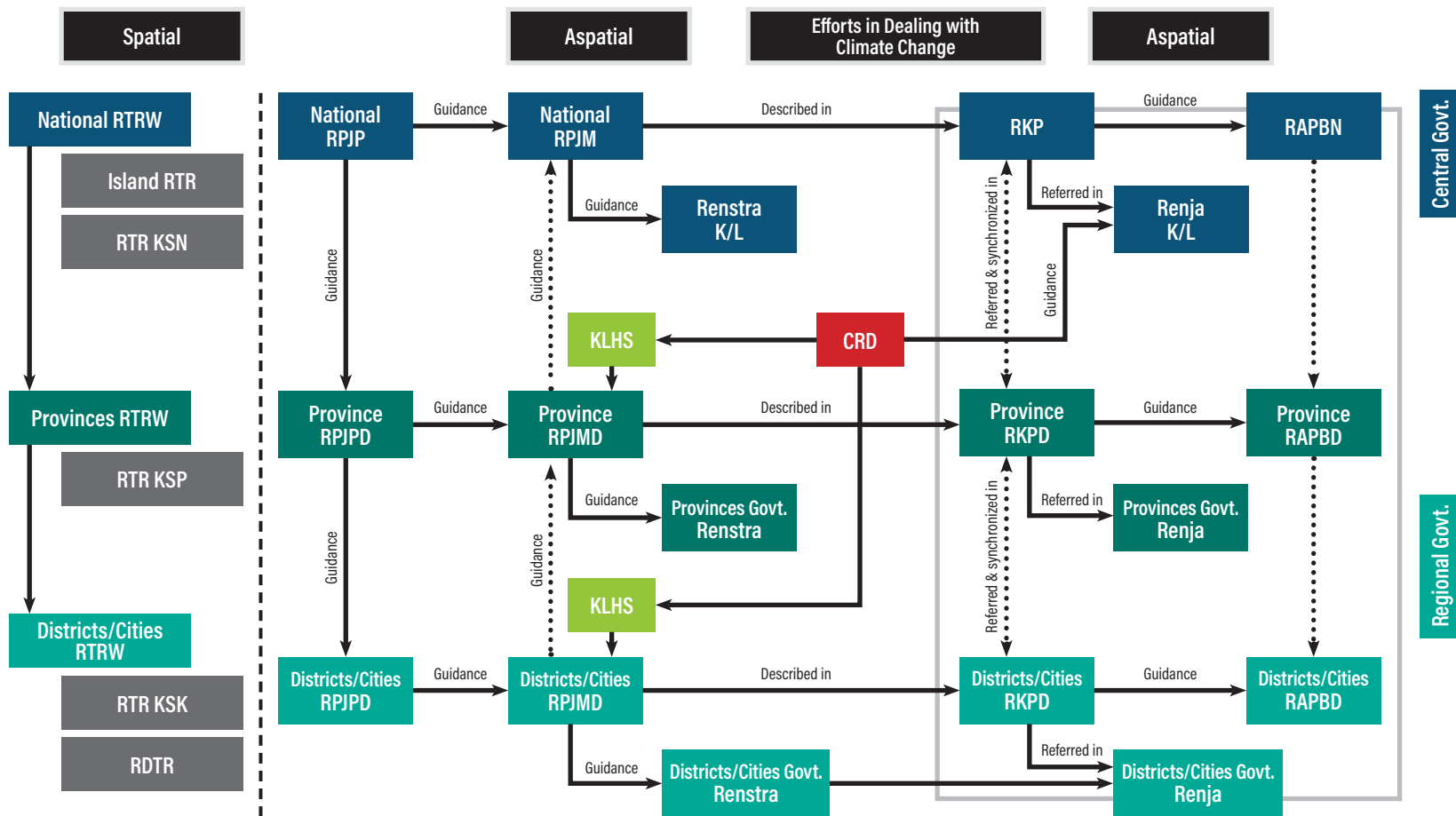


Figure 2. Synchronization of National and Regional Development Planning

In line with the authority of local governments, **the local bureaucracy (OPD) has a role in the planning, implementation, monitoring and evaluation of climate resilience development**, which include:

1. OPD which has the authority in the regional development planning process, in this case to ensure that the issue of regional climate resilience is a priority in the RJPMD and Local Government Work Plan (RKPD).
 2. OPD which has authority in the marine and coastal sector.
 3. OPD which has authority in the water sector.
 4. OPD which has authority in the agricultural sector.
 5. OPD which has authority in the health sector.
 6. OPD which has authority in the aspects of regional infrastructure development.
 7. OPD which has authority in regional disaster management.
-



3.

Mapping of Primary Duties & Functions of Ministries & Institutions

3.1 Regulatory Framework

The regulatory framework is essential to enhance understanding and policy literacy related to duties, functions and authorities and the elaboration of institutional roles in Climate Resilience Development to achieve strategic goals. Additionally, this regulatory framework is needed to solve the problems faced in Climate Resilience Development, both at the central and local levels. The structure of the regulatory framework for Climate Resilience Development is illustrated in **Figure 3**.

The general framework regarding the national development control mechanism is under the coordination of PPN/Bappenas as an institution with the authority to control development as stated in Presidential Decree Number 65 and Number 66 of 2015 which regulates that the Ministry of National Development Planning/Bappenas is obliged to carry out development planning affairs. Furthermore, the key regulations related to Climate Resilience Development are referring to Presidential Regulation

Number 18 of 2020 on 2020-2024 National Medium-Term Development Plan (RPJMN). However, in order to support the implementation of Climate Resilience Development in the long term, a regulation in the form of a Ministerial Regulation (Permen) is needed to strengthen the implementation of Climate Resilience Development until 2045.

To promote the implementation of Climate Resilience Development activities in the regions, the implementation will be in line with Law Number 23 of 2014 on Regional Government Affairs. Local governments are expected to integrate Climate Resilience Development into RPJMD in their regions. The stages and procedures for its preparation should refer to PP Number 17 of 2017 on Synchronization of Planning and Budgeting Processes and Government Regulation Number 8 of 2008 on Stages, Procedures for Preparation, Control and Evaluation of the Implementation of Regional Development Plans.

In the context of implementing Climate Resilience Development in each sector, regulatory support related to institutions is needed. This is to be used as a reference that each Ministries/Institutions (K/L) has a role and contribution in accordance with the main duties and functions as stated in the regulations that oversee it, be it Laws, Government Regulations or Presidential

Regulations. In the Marine and Coastal Sector, The Ministry of Marine Affairs and Fisheries (KKP) and the Ministry of Transportation are key K/L in implementing climate resilience development actions. In the Water Sector, the Ministry of Public Works and Public Housing and the Ministry of Environment and Forestry play as the key K/L. Meanwhile, in Agricultural and Health Sector,

the key K/L are the Ministry of Agriculture and the Ministry of Health, respectively. In carrying out the actions to implement climate resilience, the key Ministries/ Institutions (K/L) coordinate and are assisted by K/L and related institutions. The mapping of the primary duties and functions of Ministries/Institutions based on overseeing regulations are detailed in **Appendix 1**.

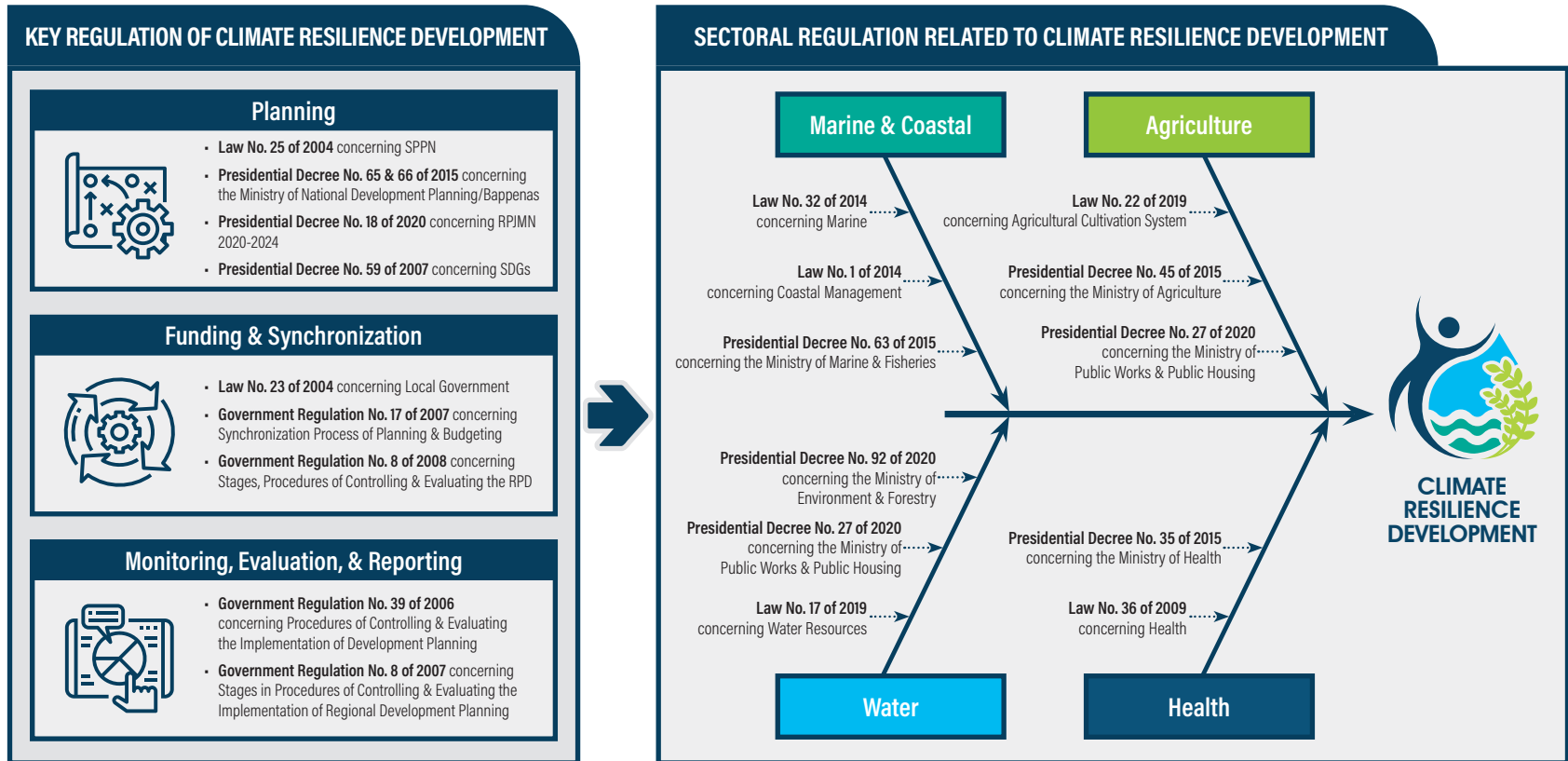


Figure 3. Climate Resilience Development Regulatory Framework

In accordance with Law Number 39 of 2008 on State Ministries and Presidential Decree Number 7 of 2015 on State Ministry Organization, the Ministry of National Development Planning/Bappenas is obliged to carry out development planning affairs within the government to assist the President in carrying out state governance. The implementation of the duties and functions of the Ministry of National Development Planning organizational unit is regulated in Presidential Decree Number 65 of 2015 on the Ministry of National Development Planning. While the implementation of the duties and functions of the Bappenas organizational unit is regulated in Presidential Decree Number 66 of 2015 on the National Development Planning Agency, as amended by Presidential Decree Number 20 of 2016. Presidential Regulation Number 18 of 2020 on the 2020-2024 National Medium-Term Development Plan is a key regulation, whereas climate resilience development is one of the national priorities. The role of the Ministry of National Development Planning/Bappenas is as an institution with the authority and responsibility for implementing the development control mechanism (Figure 4).

Meanwhile, the Monitoring, Evaluation and Reporting of Climate Resilience Development implementation refers to Government Regulation Number 39 of 2006 on Procedures for Control and Evaluation of the Implementation of Development Plans. It also refers to Government Regulation Number 8 of 2008 on Stages of Procedures for Compiling Control and Evaluation on the Implementation of Regional Development Plans, which stated that the national and regional development planning cycle consists of 4 (four) phases, beginning with (i) Plan Formulation, (ii) Plan Establishment, (iii) Control of Plan Implementation and (iv) Evaluation of Plan Implementation.

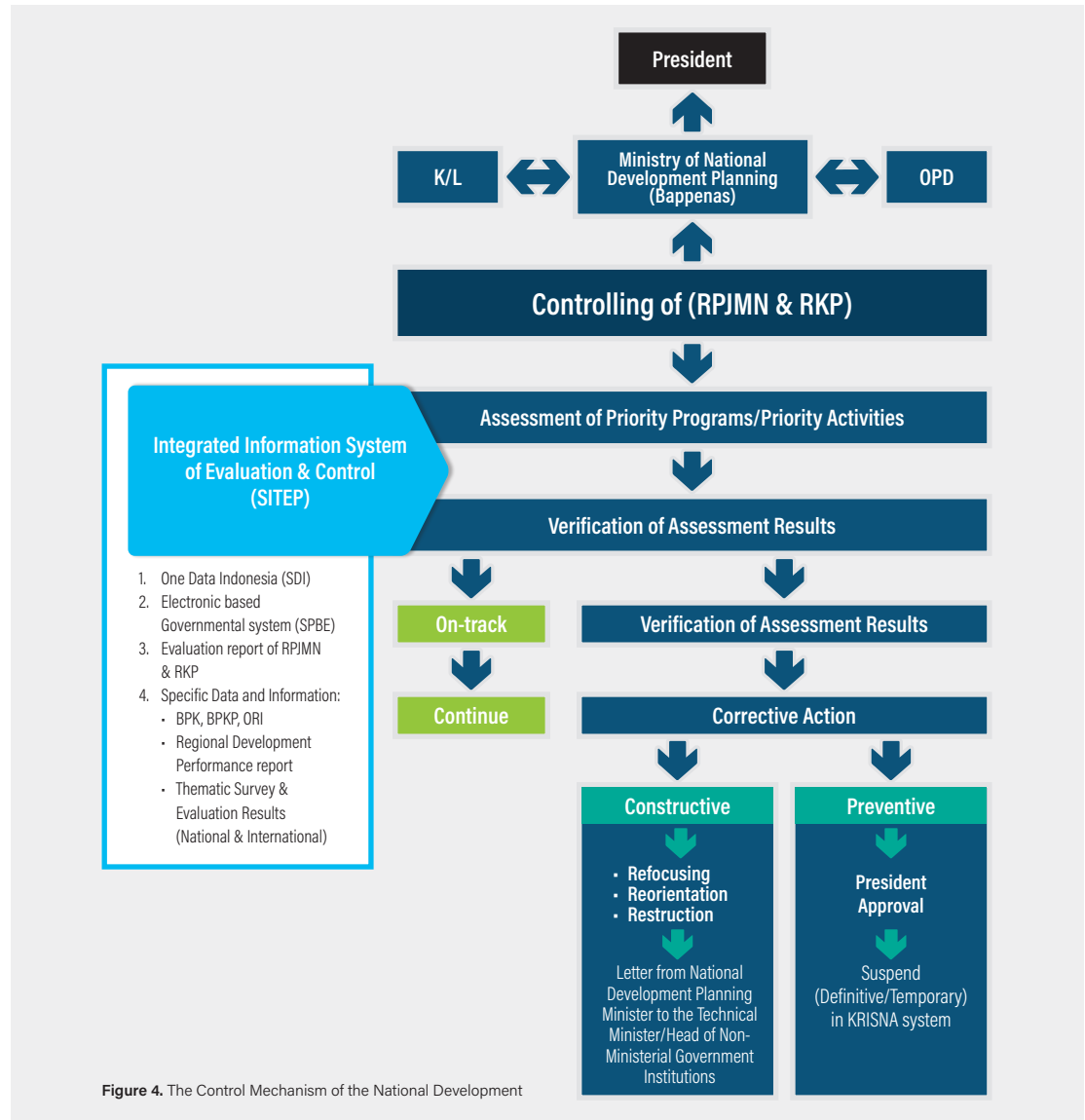


Figure 4. The Control Mechanism of the National Development

3.2 Regulations Related to The Marine & Coastal Sector

In the Marine and Coastal Sector, Climate Resilience Development supports the implementation of Law Number 32 of 2014 on Marine Affairs and Law Number 1 of 2014 on Amendments to Law Number 27 of 2007 on the Management of Coastal Areas and Small Islands. Law Number 32 of 2014, which is supported by the actions of Climate Resilience Development, has two objectives: (1) to create a sustainable and safe sea as a living space and space for the Indonesian people to fight, and (2) to utilize Marine Resources in a sustainable manner to the maximum extent possible for the welfare of the current generation without compromising the interests of future generations. Specifically, Climate Resilience Development supports the mandate in Law Number 32 of 2014, which is the importance of developing ship technology by adjusting the potential for disasters and anticipating

marine protection against marine disasters due to global warming (rising temperatures, rising sea levels, and/or el ninno and el nina) as mandated in Article 22 paragraph 2, Article 25-27 and Article 50-57.

Meanwhile, the purpose of Law Number 1 of 2014 is to provide adequate authority and responsibility for the state on the management of coastal waters and small islands. Specifically, Climate Resilience Development supports Law Number 1/2014, the management of coastal areas and small islands is carried out with the aim of preserving, conserving, rehabilitating and mitigating disasters in coastal areas and small islands as mandated in Article 4, Article 28, Article 32 paragraph 2, Article 42 paragraph 2, and Articles 56-59.

3.3 Regulations Related to The Water Sector

In the Water Sector, Climate Resilience Development supports the implementation of Law Number 17 of 2019 on Water Resources. As mandated by the Law, the basis for the action on Climate Resilience Development is the anticipation effort in facing imbalance in the future that the availability of water tends to decrease and the demand for water is increasing so that water resources need to be managed by paying attention to social, environmental, and the economy functions in a harmonious way.

Specifically, Climate Resilience Development supports the implementation of Law Number 17 of 2019, which stated that water resources management is carried out based on the principles of environmental insights, conservation and sustainability. Especially for the fulfillment of water for the basic needs of the community and for irrigation needs for agriculture through the rehabilitation of water areas, the application of watershed protection technology (DAS), and flood management. This is as mandated in Article 2, Article 21, Article 22 paragraph 2, Article 28 paragraph 1 and 2.

3.4 Regulations Related to The Agriculture Sector

The issue of climate resilience in the Agricultural Sector supports the implementation of the Law Number 11 of 2019 on Sustainable Agricultural Cultivation System. The Sustainable Agricultural Cultivation System refers to Law Number 22 of 2019, in principle, is an agricultural management (cultivation) paradigm that integrates four aspects: environmental, social, cultural and economic. This is in order to pay attention to the carrying capacity of the ecosystem, adaptation to climate resilience for the realization of food security, and environmental sustainability to create an advanced, efficient and resilient agricultural system.

The implementation of agricultural cultivation is defined through extensification, intensification and diversification efforts taking into account climate change. The success of agricultural development through the implementation of agricultural cultivation will be achieved well if it is supported by advances in environmentally-friendly agricultural technology. Specifically, Climate Resilience Development supports the implementation of Law Number 22 of 2019, namely to improve productivity of agricultural products, to increase farmers' income, and strive for water availability by considering environmental conditions. This is as mandated in Article 2, Article 3, Article 7, and Article 47 paragraph 3.

3.5 Regulations Related to The Health Sector

In the Health Sector, Climate Resilience Development supports the implementation of Law Number 36 of 2009 on Health. The backgrounds are: (1) every activity aimed to maintain and improve the highest public health status is carried out based on non-discriminatory participatory and sustainable principles in the framework of forming Indonesia's human resources, as well as enhancing nation's resilience and competitiveness for national development, and (2) anything that causes health problems to the people of Indonesia will result in economic losses for the country, and every

effort to improve the degree of public health also means investment in the country's development.

Specifically, Climate Resilience Development supports the implementation of Law Number 36 of 2009 through improving health facilities, developing health products and utilizing health information technology, overcoming infectious diseases, and improving the quality of healthy environment as mandated in Articles 30-35, Article 42 paragraph 1, Article 157 paragraph 2, and Article 162.

4.

Expertise Role in Climate Resilience

Expertise required in climate resilience issues is divided into 3 (three) stages of the development process:

1. Planning,
2. Implementation,
3. Monitoring and Evaluation.

These stages can run effectively if supported by the following **specifications of expertise**:

1. In the field of economic valuation for climate resilience activities, especially in 4 (four) priority sectors: Marine and Coastal, Water, Agriculture and Health.
2. In the field of meteorology and climatology, both in the aspects of climate projections and related to the determination of climate hazards.
3. In the field of agriculture especially on climate-smart agriculture and agriculture insurance.
4. In the marine and coastal sector, particularly in the development and application of wave-resistant ship technology and coastal inundation prevention technology.
5. In the field of water resources, especially the use of geospatial technology to accelerate the development of water resources infrastructure.
6. In the health sector, especially resistance to vector-borne based diseases.
7. Policies and institutions, particularly those related to climate resilience issues.
8. Monitoring, evaluation and reporting (PEP), especially those who understand the concept of PEP RPJMN and RPJMD. Additionally, expertise is needed to develop an online-based PEP system to make the process more effective, efficient and transparent.



5.

Institutional Coordination Mechanism for the Implementation of Climate Resilience Action

It is necessary for the governance to run effectively in implementing the 2005-2025 National Long-Term Development Plan (RPJPN) and the 2010-2025 Bureaucratic Reform Grand Design to create good and authoritative governance based on law and a professional and neutral bureaucracy. Currently, institutions in the context of implementing the RPJMN are already running well, whereas the Ministry of National Development Planning/Bappenas encourages the achievement of growth and equity through central and regional integration with a holistic-thematic, integrative and spatial approach. In accordance with Law Number 25 of 2004, the Ministry of Development Planning/Bappenas has a strategic role in national development planning, which is the stage of formulating the national development plan as well as in the stage of controlling and evaluating the implementation of the national development plan.

The Ministry of National Development Planning/Bappenas also functions as a system integrator that integrates all development activities and controls the

implementation of the national development plan. This control function was further strengthened by the issuance of PP Number 17 of 2017. The key message in Article 1 is Priority Projects, a project implemented by the Central Government, Local Government, and/or Business Entities that have a strategic nature and a certain time frame to support the achievement of development priorities. Then in the Article 4 paragraph 1, the Funding Framework is carried out by integrating both government and non-government funding sources, which are utilized in the context of achieving the National Development Goals.

On the other hand, based on the Plenary Cabinet Session, President Joko Widodo emphasized the Ministry of National Development Planning/Bappenas as a Clearing House to focus on managing national priority programs/projects that involve ministries/institutions/local governments, for example Clearing House for priority program planning and Clearing House planning control (covering monitoring, evaluation, and follow-up recommendations).

In terms of climate resilience, the role of Bappenas as the Clearing House focuses on planning and controlling National Priority 6, Priority Program 2 as stated in the 2020-2024 RPJMN. On the other hand, the Ministry of National Development Planning/Bappenas has translated the President's Vision and Mission into seven (7) development agendas, one of which being the Climate Resilience Development. The scheme of the Climate Resilience Development coordination mechanism is illustrated in Figure 5.

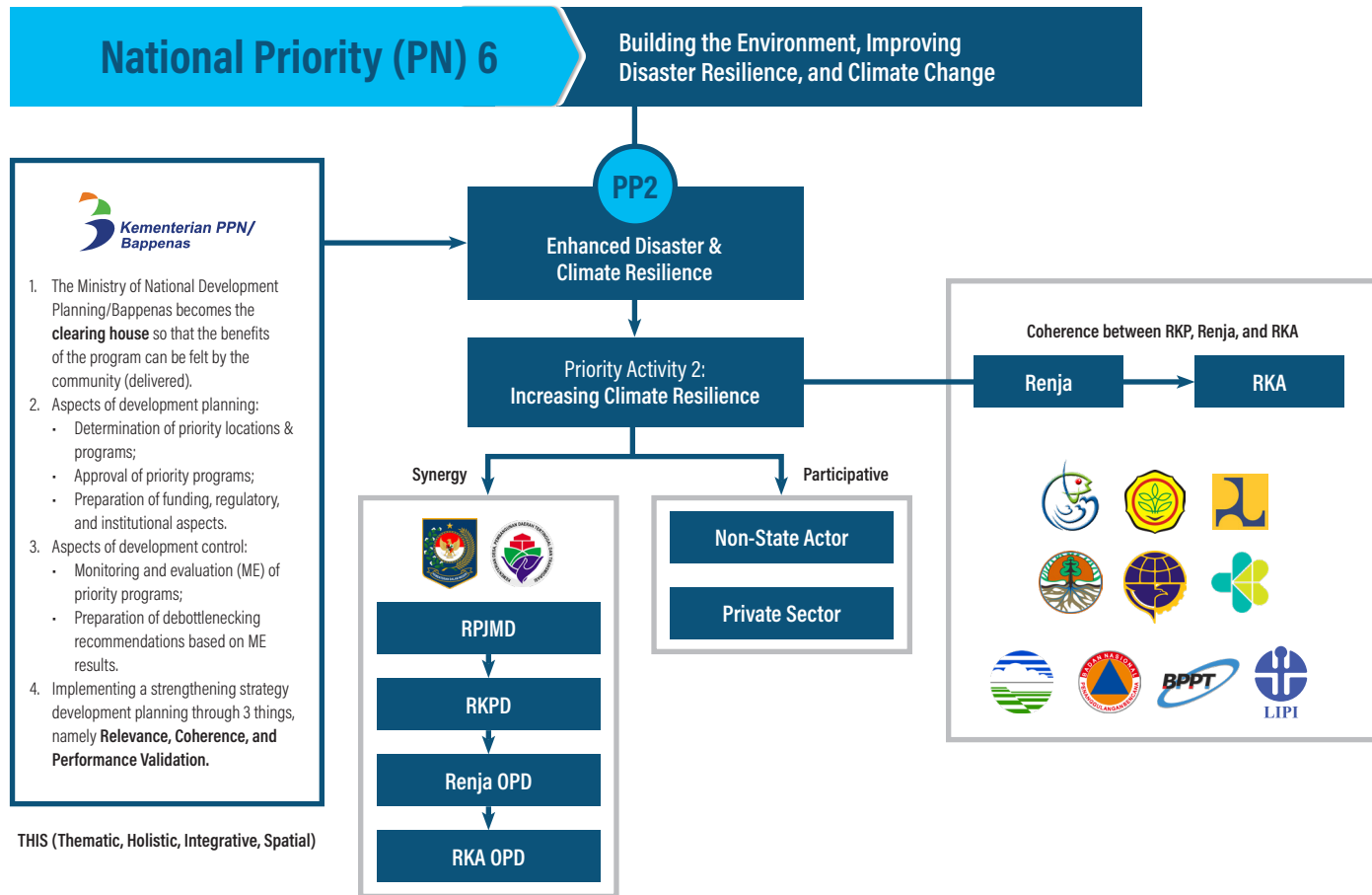


Figure 5. Climate Resilience Development Coordination Mechanism

The National Climate Resilience Secretariat, a supporting instrument to assist the Ministry of National Development Planning/Bappenas is needed to support the Ministry's role as a Clearing House. The Secretariat is under the coordination of the Directorate of Environment of the Ministry of National Development Planning/Bappenas which duties and functions are as follow:

1.

Assessing national climate hazards.

- In this case, the National Resilience Secretariat organizes workshops, focus group discussions, and other similar activities;
- Manage data bank management related to national climate hazard data.

2.

Formulating and updating climate resilience action activities through the formulation of policies and action steps for national climate resilience.

3.

Conducting cross-sectoral coordination.

- Supporting cross-sector assessment and studies;
- Providing consultation service;
- Supporting the process of facilitation and coordination among stakeholders, organizing meetings, and preparing substance materials.

4.

Develop and oversee the implementation of Climate Resilience Development in the regions.

- Support te development of Regional Action Plan for Climate Resilience;
- Support the process of sectoral coordination between Ministiries/ Institutions and regions.

5.

Collaborating with other stakeholders (NGOs, CSOs, universities, private sectors, communities, etc.)

- Support the development of concepts and approaches to engage the private sectors in Climate Resilience Development action;
- Support the idea of forming a network of experts or academics for the capacity building process;
- Organizing consultative meetings.

6.

Carry out a process of Monitoring, Evaluation, and Reporting (PEP).

- Provide technical support to Ministries/Instistutions or Local Bureaucracy for the PEP process;
- Ensure that the PEP process runs every year.

6.

Closing

The institutional function in implementing Climate Resilience Development is aimed for the creation of optimal climate resilience planning and action. With the publication of the Institutional Arrangement for Climate Resilience book, hopefully, each Ministries and Institutions can be more focused in carrying out Climate Resilience Development implementation actions because climate resilience in each sector will depend on the performance and coordination between key Ministries/Institutions and their supporting institutions. The next step is to assess how the efforts to mainstream the 2020-2024 RPJMN can be responded to by the Ministries/Institutions and Local Bureaucracy (OPD) in the preparation of Strategic Planning (Renstra)/Regional Strategic Planning (Renstrada) and Ministries/Institution Work Plan (Renja K/L) and OPD. On the other hand, there is still a need for coordination and active involvement of all elements of development, which include private sectors, development partners, academics, NGOs and communities.

This book on Institutional Arrangement for Climate Resilience is part of the document on Climate Resilience Development. In addition, other documents will be issued including List of Locations and Actions for Climate Resilience, Role of Non-State Actors for Climate Resilience, Funding for Climate Resilience, and Monitoring & Evaluation of Climate Resilience Actions in National Planning.



Appendix

Mapping of Primary Duties & Functions of Ministries/Institutions

Sector	Regulations	Ministries & Institutions (K/L)
 <p>Marine & Coastal</p>	<ul style="list-style-type: none"> ▪ Law Number 32 of 2014 on Marine Affairs replaced and revokes Law Number 6 of 1996 on Indonesian Waters. ▪ Law Number 1 of 2014 on Amendments to Law Number 27 of 2007 on Management of Coastal Areas and Small Islands. ▪ Presidential Regulation Number 63 of 2015 on the Ministry of Marine Affairs and Fisheries. ▪ Presidential Regulation Number 40 of 2015 on the Ministry of Transportation 	<p>Key K/L:</p> <ul style="list-style-type: none"> ▪ Ministry of Marine Affairs and Fisheries (KKP) ▪ Ministry of Transportation <p>K/L and related institutions:</p> <ul style="list-style-type: none"> ▪ Ministry of Village, Development of Disadvantaged Regions, and Transmigration ▪ Ministry of Public Works and Public Housing ▪ Ministry of Transportation ▪ Ministry of Social Affairs ▪ Ministry of Environment and Forestry ▪ National Disaster Management Agency ▪ Indonesian Agency for Meteorology, Climatology and Geophysics ▪ Agency for the Assessment and Application of Technology ▪ Indonesia Institute of Sciences ▪ Local Government ▪ NGOs
 <p>Water</p>	<ul style="list-style-type: none"> ▪ Law Number 22 of 2019 on Sustainable Agriculture System ▪ Law Number 17 of 2019 on Water Resources ▪ Presidential Regulation Number 27 of 2020 on Ministry of Village, Development of Disadvantaged Regions, and Transmigration ▪ Presidential Regulation Number 92 of 2020 on Ministry of Environment and Forestry ▪ Presidential Regulation Number 45 of 2015 on Ministry of Agriculture ▪ Presidential Regulation Number 1 of 2019 on National Disaster Management Agency 	<p>Key K/L:</p> <ul style="list-style-type: none"> ▪ Ministry of Village, Development of Disadvantaged Regions, and Transmigration ▪ Ministry of Environment and Forestry <p>K/L and related institutions:</p> <ul style="list-style-type: none"> ▪ National Disaster Management Agency ▪ Indonesian Agency for Meteorology, Climatology and Geophysics ▪ Agency for the Assessment and Application of Technology ▪ Indonesia Institute of Sciences ▪ Local Government ▪ NGOs

Sector	Regulations	Ministries & Institutions (K/L)
 <p data-bbox="180 454 312 481">Agriculture</p>	<ul style="list-style-type: none"> <li data-bbox="409 165 1106 219">▪ Law Number 22 of 2019 on Sustainable Agriculture System <li data-bbox="409 229 872 283">▪ Presidential Regulation Number 46 of 2015 on Ministry of Social Affairs; <li data-bbox="409 294 1106 348">▪ Presidential Regulation Number 61 of 2008 on Indonesian Agency for Meteorology, Climatology and Geophysics; <li data-bbox="409 358 872 412">▪ Presidential Regulation Number 45 of 2015 on Ministry of Agriculture; <li data-bbox="409 423 896 477">▪ Presidential Regulation Number 27 of 2020 on Ministry of Public Works and Public Housing <li data-bbox="409 487 845 541">▪ Presidential Regulation Number 1 of 2019 on National Disaster Management Agency <li data-bbox="409 552 1245 606">▪ Presidential Regulation Number 85 of 2020 on Ministry of Village, Development of Disadvantaged Regions, and Transmigration; <li data-bbox="409 616 1001 670">▪ Presidential Regulation Number 65 of 2020 on Ministry of Women Empowerment and Child Protection 	<p data-bbox="1290 180 1382 206">Key K/L:</p> <p data-bbox="1290 212 1629 239">Ministry of Agriculture (Kementan)</p> <p data-bbox="1290 244 1582 271">K/L and related institutions:</p> <ul style="list-style-type: none"> <li data-bbox="1290 276 1747 303">▪ Ministry of Public Works and Public Housing <li data-bbox="1290 309 1747 362">▪ Ministry of Village, Development of Disadvantaged Regions, and Transmigration <li data-bbox="1290 368 1549 395">▪ Ministry of Social Affairs <li data-bbox="1290 400 1698 427">▪ National Disaster Management Agency <li data-bbox="1290 432 1667 486">▪ Indonesian Agency for Meteorology, Climatology and Geophysics <li data-bbox="1290 491 1770 545">▪ Agency for the Assessment and Application of Technology <li data-bbox="1290 551 1610 577">▪ Indonesia Institute of Sciences <li data-bbox="1290 583 1496 610">▪ Local Government <li data-bbox="1290 615 1374 642">▪ NGOs
 <p data-bbox="207 998 283 1025">Health</p>	<ul style="list-style-type: none"> <li data-bbox="409 838 677 892">▪ Law Number 36 of 2009 on Health <li data-bbox="409 903 872 956">▪ Presidential Regulation Number 35 of 2015 on Ministry of Health <li data-bbox="409 967 1100 1021">▪ Presidential Regulation Number 61 of 2008 on Indonesian Agency for Meteorology, Climatology and Geophysics <li data-bbox="409 1032 852 1085">▪ Presidential Regulation Number 1 of 2019 on National Disaster Management Agency 	<p data-bbox="1290 758 1382 784">Key K/L:</p> <p data-bbox="1290 790 1587 817">Ministry of Health (Kemenkes)</p> <p data-bbox="1290 822 1582 849">K/L and related institutions:</p> <ul style="list-style-type: none"> <li data-bbox="1290 854 1747 881">▪ Ministry of Public Works and Public Housing <li data-bbox="1290 887 1549 913">▪ Ministry of Social Affairs <li data-bbox="1290 919 1698 946">▪ National Disaster Management Agency <li data-bbox="1290 951 1667 1005">▪ Indonesian Agency for Meteorology, Climatology and Geophysics <li data-bbox="1290 1010 1770 1064">▪ Agency for the Assessment and Application of Technology <li data-bbox="1290 1069 1610 1096">▪ Indonesia Institute of Sciences <li data-bbox="1290 1102 1496 1128">▪ Local Government <li data-bbox="1290 1134 1374 1161">▪ NGOs

Sector	Regulations
Cross-Sectoral	<ul style="list-style-type: none"> ▪ Law Number 25 of 2004 on National Development Planning System ▪ Law Number 17 of 2003 on State Finances ▪ Law Number 9 of 2015 on the Second Amendment of Law Number 23 of 2014 on Local Government ▪ Law Number 39 of 2008 on the Ministry of State ▪ Law Number 23 of 2014 on Local Government ▪ Law Number 30 of 2014 on Government Administration ▪ Government Regulation (Peraturan Pemerintah - PP) Number 39 of 2006 ▪ PP Number 8 of 2008 and the Regulation of the Ministry of Home Affairs Number 54 of 2010 ▪ Presidential Regulation Number 65 of 2015 on Ministry of National Development Planning ▪ Presidential Regulation Number 57 of 2020 on Ministry of Finance ▪ Presidential Regulation Number 66 of 2015 on Indonesian Agency of National Development Planning (Bappenas) ▪ Government Regulation (Peraturan Pemerintah - PP) Number 17 of 2017 on Synchronization of the National Development Planning and Budgeting Process ▪ Presidential Regulation Number 18 of 2020 on the 2020-2024 National Medium-Term Development Plan ▪ Presidential Regulation Number 11 of 2015 on Ministry of Home Affairs ▪ Presidential Regulation Number 68 of 2019 on Organization of State Ministries



Photo by Shutterstock on Pexels





Photo by Tom Pisk on Pixels

BOOK 2

**INSTITUTIONAL
ARRANGEMENT FOR
CLIMATE RESILIENCE**



Ministry of National Development Planning/Bappenas
Jl. Taman Suropati No.2 Jakarta, 10310
Phone: (+62 21) 3193 6207

🌐 lcdi-indonesia.id
📷 [lcdi.id](https://www.instagram.com/lcdi.id) [f @lcdi.id](https://www.facebook.com/lcdi.id) [🐦 @LCDI_Indonesia](https://twitter.com/LCDI_Indonesia)
▶ [Low Carbon Development Indonesia](#)