Based on Article 25 paragraph (3) and Article 28 paragraph (4) of the Law on Climate Action (Official Gazette of Republic of North Macedonia No. ??), the Government of the Republic of North Macedonia on the session held on ??, adopted

DECREE

on determination of the activity data, manner, form and deadlines for their submission as well as the manner, form and deadlines of reporting information on implementation of policies and measures

Article 1

Subject matter

- (1) This Decree determines the list of activity data required for determination of the National greenhouse gas inventory, Approximated greenhouse gas inventory and for the preparation the National inventory report and the manner, form and deadlines for their submission to the body of the state administration responsible for the affaires in the field of environment (hereinafter: body responsible for the environment).
- (2) This Decree also determines the manner, form and deadlines for reporting information on implementation of policies and measures to the body responsible for the environment.

Article 2

List of activity data

The activity data relevant for determination of the National greenhouse gas inventory, Approximated greenhouse gas inventory and for the preparation the National inventory report pursuant to Article 24 of the Law on climate action, are determined in Annex I that is an integral part of this Decree.

Article 3

Submission of the activity data

- (1) Authorities and organisations as determined in Article 26 of the Law on climate action, shall notify the body responsible for the environment, about nominated:
- 1) Responsible person who will be in charge for collection and reporting the activity data and
- 2) Responsible person who will be in charge for validation of the data.
- (2) Authorities and organisation referred to in paragraph (1) of this Article shall submit the activity data determined in Annex I of this Decree to the body responsible for the environment, latest by 15 August each year for the previous year.
- (3) For determination of the approximated greenhouse gas inventory with preliminary data in accordance with the Article 24 paragraph (5) from the Law on Climate Action, authorities and organizations referred to in paragraph (1) of this Article, shall submit the available activity needed for the determination approximated greenhouse gas inventory to the body responsible for the environment by 15 March each year for the previous year.
- (4) Authorities and organisations referred to in paragraph (1) of this Article shall submit data referred to in paragraph (2) and (3) of this article in hard copy in the templates submitted in advance to them by the body responsible for the environment and in electronic form if deemed necessary.
- (5) If required by the body responsible for the environment, authorities and organisations the activity data from paragraph (2) and (3) of this article, shall upload in the Electronic platform for data exchange pursuant to Article 34 of the Law on climate action.

Article 4

Information on the implementation of policies and measures

Authorities and organizations referred to in Article 28 paragraph (4) from the Law on Climate Action, shall every second year by 1 January submit to the body responsible for the environment information on the implementation of policies and measures from their area of responsibility by using the format defined in Annex II that is an integral part of this Decree.

Article 5

Transitional provisions

- (1) Provisions of Article 3 paragraph (2) and (3) and Article 4 will start with implementation upon accession of the Republic of North Macedonia to the European Union.
- (2) Notwithstanding paragraph (1) of this Article, until accession of the Republic of North Macedonia to the European Union, authorities and organizations in charge as defined in Annex I of this Decree, shall submit the activity data and other relevant data determined in Annex I of this Decree within deadline requested by the body responsible for the environment.
- (3) Authorities and organizations referred to in Article 3 of this Decree, shall notify the body responsible for the environment about responsible persons pursuant Article 3 paragraph (1) of this Decree within three months from entry into force of this Decree.
- (4) Notwithstanding paragraph (1) of this Article, until accession of the Republic of North Macedonia to the European Union, authorities and organizations referred to in Article 4 of this Decree, shall submit data and information on the implementation of policies and measures as referred to in Annex II of this Decree within deadline requested by the body responsible for the environment.

Article 6

Entry into force

This Decree shall enter into force on the eighth day following that of its publication in the "Official Gazette of the Republic of North Macedonia."

ANNEX I. List of activity data pursuant to Article 2 hereof

SECTOR: ENERGY

Indication	Su	b sector	Activity data	Authority/Organisation in charge
			Quantity of fuel used in kt,m³ or TJ, by fuel type and energy production facility	
			Net calorific value in TJ/kt ,TJ/m³ or toe	State Statistical Office
1. 1.	Energy industrie	s	Carbon content C t/TJ or Fixed carbon* C fix (%) for solid fuels	JSC Power Plants of North Macedonia
			Detailed specification for the fuels used	
			Quantity of fuel used in kt, m³ or TJ, by fuel type and energy production facility	
1. 2.	Manufacturing in	dustries and	Net calorific value in TJ/kt or TJ/m³ or toe.	State Statistical Office
	Construction		Carbon content C t/TJ or Fixed carbon [†] C fix (%) for solid fuels	
			Detailed specification for the fuels used	
			Quantity of fuel used for domestic flights in kt.	
			Net calorific value in TJ/kt or toe	State Statistical Office
1. 3.	Transport	Domestic aviation		
				MNAV GOJSC
			Number of domestic flight by aircraft type and route details	

^{*} Fixed carbon is the solid combustible residue that remains after a coal particle is heated and the volatile matter is expelled. The fixed-carbon content of a coal is determined by subtracting the percentages of moisture, volatile matter, and ash from a sample.

[†] Fixed carbon is the solid combustible residue that remains after a coal particle is heated and the volatile matter is expelled. The fixed-carbon content of a coal is determined by subtracting the percentages of moisture, volatile matter, and ash from a sample.

Indication	Su	b sector	Activity data	Authority/Organisation in charge
			Quantity of fuel used in kt or m³ by fuel type	State Statistical Office
1. 4.		Road transportation	Number of registered vehicles by category, subcategory, production year, fuel type, engine capacity (in cm3), raw weight of the vehicle, gross weight of the vehicle and number of passengers	Ministry of Interior
1. 5.		Railways	Quantity of fuel used in kt Net calorific value in TJ/kt	State Statistical Office
1. 6.		Commercial /institutional	Quantity of fuel used in kt or m ³ Net calorific value in TJ/kt or TJ/m ³	State Statistical Office
1. 7.	Other sectors	Housing	Quantity of fuel used in kt or m ³ Net calorific value in TJ/kt or TJ/m ³	State Statistical Office
1. 8.		Agriculture / forestry/ fishery	Quantity of fuel used in kt or m ³ Net calorific value in TJ/k tot TJ/m ³	State Statistical Office

Indication	Sub sector	Activity data	Authority/Organisation in charge
1. 9.	Other (specified elsewhere)	Quantity of fuel used in kt or m ³ Net calorific value in TJ/k tot TJ/m ³	State Statistical Office
1. 10.	Fugitive emissions from fuels	Amount of raw coal production in tonnes Amount of natural gas vented from the pipeline during the transmission and distribution processes in m3 Amount of natural gas flared during the transmission and distribution processes in m3	State Statistical Office

SECTOR: INDUSTRIAL PROCESSES AND PRODUCT USE

Indication	Subsector	Activity data	Authority/Organisation in charge
2. 1.	Production of cement	Weight (mass) of cement produced per type, tonnes Weight (mass) of clinker produced, tonnes Clinker fraction of cement per type, fraction Imports for consumption of clinker, tonnes Exports of clinker, tonnes Calcination factor	State Statistical Office Ministry of Environment and Physical Planning
2. 2.	Lime production	Weight of lime produced per type, tonnes Specific lime types listed Weight or mass of carbonate consumed, tonnes Fraction calcination achieved for carbonate, fraction	State Statistical Office Ministry of Environment and Physical Planning
2. 3.	Limestone and Dolomite Use	Process type Quantity of used limestone or dolomite, tonnes	State Statistical Office Ministry of Environment and Physical Planning
2. 4.	Soda Ash Production and Use	Process type Quantity of used limestone or dolomite, tonnes	State Statistical Office Ministry of Environment and Physical Planning

Indication	Subsector	Activity data	Authority/Organisation in charge
		Quantity of used Trona, tonnes	
2. 5.	Asphalt Roofing	Weight of asphalt produced, tonnes Process type Saturation and blowing type	State Statistical Office Ministry of Environment and Physical Planning
2. 6.	Road Paving with Asphalt	Weight of used asphalt, tonnes Covered surface Technology type	State Statistical Office Ministry of Environment and Physical Planning
2. 7.	Ceramic Production	Weight (mass) of ceramic produced per type, tonnes Weight (mass) of used clay, tonnes Process type	State Statistical Office Ministry of Environment and Physical Planning
2. 8.	Glass Production	Weight (mass) of glass produced per type, tonnes Cullet ratio Types of glass	State Statistical Office Ministry of Environment and Physical Planning
2. 9.	Ammonia Production	Ammonia production, tonnes Fuel requirement per unit of output, GJ/tonne ammonia produced Carbon content factor of the fuel, kg C/GJ Carbon oxidation factor of the fuel, fraction CO2 recovered for downstream use (urea production), kg	State Statistical Office Ministry of Environment and Physical Planning
2. 10.	Nitric Acid Production	Nitric acid production, tonnes	State Statistical Office Ministry of Environment and Physical Planning
2. 11.	Adipic Acid Production	Adipic acid production, tonnes	State Statistical Office Ministry of Environment and Physical Planning
2. 12.	Carbide Production	Activity data on petroleum coke consumption or carbide production, tonnes raw material used or tonnes carbide produced	State Statistical Office Ministry of Environment and Physical Planning

Indication	Subsector	Activity data	Authority/Organisation in charge
2. 13.	Iron and Steel Production	Process type Quantity of produced iron and steel Quantity of coke produced nationally, tonnes Quantity of coking coal consumed for coke production in onsite integrated iron and steel production facilities, tonnes Quantity of other process material a, other than those listed as separate terms, such as natural gas, and fuel oil, consumed for coke and sinter production in onsite coke production and iron and steel production facilities, tonnes Quantity of coke produced onsite at iron and steel production facilities, tonnes Quantity of coke oven by-product b, transferred offsite either to other facilities, tonnes	State Statistical Office Ministry of Environment and Physical Planning
2. 14.	Ferroalloys Production	Process type Production of ferroalloy type, tonnes Mass of reducing per agent, tonnes Carbon content in non-product outgoing stream I, tonnes C/tonne Reducing agent characteristics	State Statistical Office Ministry of Environment and Physical Planning
2. 15.	Aluminium Production	Process type Production of aluminium per type, tonnes Mass of reducing agent, tonnes Carbon content in non-product outgoing stream I, tonnes C/tonne Reducing agent characteristics	State Statistical Office Ministry of Environment and Physical Planning
2. 16.	Magnesium production	Process type Production of magnesium per type, tonnes Mass of reducing agent, tonnes Carbon content in non-product outgoing stream I, tonnes C/tonne Reducing agent characteristics	State Statistical Office Ministry of Environment and Physical Planning
2. 17.	Pulp and Paper	Process type Production of pulp and paper per type, tonne Quantity of used pulp, tonnes	State Statistical Office Ministry of Environment and Physical Planning

Indication	Subsector	Activity data	Authority/Organisation in charge
2. 18.	Food and Drink	Produced beverage, hl	State Statistical Office
		Produced food, tonnes	Ministry of Environment and Physical Planning
2. 19.	By-product Emissions	Quantity of side-products, tonnes	Ministry of Environment and Physical Planning
2. 20.	Fugitive Emissions	Quantity of fugitive emissions (Gg)	Ministry of Environment and Physical Planning
2. 21.	Refrigeration and Air Conditioning Equipment	Number of refrigerators and air conditioners Freon types Reservoir (m3)	Ministry of Environment and Physical Planning
2. 22.	Foam Blowing	Total HFC used in manufacturing new closed-cell foam in year t, tonnes HFC emissions prevented by recovery and destruction of foams and their blowing agents in year t, tonnes	Ministry of Environment and Physical Planning
2. 23.	Fire Extinguishers	Servicing of equipment containing the refrigerant does not commence until 3 years after the equipment is installed. Emissions from banked refrigerants average 15 percent annually across the whole RAC application area. Sales of a specific refrigerant in the year to be reported	Ministry of Environment and Physical Planning
2. 24.	Aerosols	Quantity of HFC and PFC contained in aerosol products sold in year t, tonnes Quantity of HFC and PFC contained in aerosol products sold in year t-1, tonnes	Ministry of Environment and Physical Planning
2. 25.	Solvents	Type of solvents; Quantity of solvents sold one year, tonnes Quantity of solvents sold in the year before, tonnes Quantity of solvents destroyed in year t— 1, tonnes	State Statistical Office Ministry of Environment and Physical Planning

SECTOR: WASTE

Indication	Subsector	Activity data	Authority/Organisation in charge

Indication	Subsector	Activity data	Authority/Organisation in charge
3. 1.	Composition of the waste fraction: paper and textiles, wood, food, garden. Quantities of removed waste (deposited) in landfills.	t waste/ year and % for fraction)	Ministry of Environment and Physical Planning
3. 2.	Communal waste (MSW) amounts and disposal to solid waste disposal sites	t waste/ year	Ministry of Environment and Physical Planning
3. 3.	Emissions from sewage, BOD5 data.	m³ urban waste water/year, kg BOD/yea	Ministry of Environment and Physical Planning
3. 4.	Production of industries and waste waters released, COD values	t industrial production/year, m³ industrial waste water/year; KG COD/m3, kg sludge/year	Ministry of Environment and Physical Planning State Statistical Office
3. 5.	Indirect emissions from human sewage	Protein content: kg /persons/year; fraction and emission factor kg N ₂ O/m ³	Ministry of Environment and Physical Planning
3. 6.	Waste waters treatment and sludge from waste waters in industries	m ³ /treated water/year m ³ /treated sludge/year	Ministry of Environment and Physical Planning State Statistical Office, Local self-government unites
3. 7.	Emissions from medical and hazardous wastes	Kt medical and hazardous waste produced per year Kt medical and hazardous waste incinerated per year	Ministry of Environment and Physical Planning

SECTOR: FORESTRY

Indication	Subsector	Activity data	Authority/Organisation in charge

Indication	Subsector	Activity data	Authority/Organisation in charge
4. 1.	Commercial harvest wood in different forest types	m³/year	Forestry and Hunting Inspectorate - Ministry of Agriculture, Forestry and Water Economy
			PE Macedonian Forest
4. 2.	Burned and converted land annually (forest to cropland, grassland, settlements, wetlands and vice-versa)	ha/ year	Forestry and Hunting Inspectorate - Ministry of Agriculture, Forestry and Water Economy
			Crisis management center
4. 3.	Management of abandonment lands (>20 years), above ground growth of biomass	ha/20 year; t wood products / ha	Forestry and Hunting Inspectorate - Ministry of Agriculture, Forestry and Water Economy
4. 4.	Annual growth of different types of forest	t wood products/ year /ha	Forestry and Hunting Inspectorate - Ministry of Agriculture, Forestry and Water Economy
			PE Macedonian Forest
			Faculty of Forestry
4. 5.	Commercial harvest of wood products	Production, export, import of types of wood (m³/year), CO2eq. emissions/sinks	Forestry and Hunting Inspectorate - Ministry of Agriculture, Forestry and Water Economy PE Macedonian Forest
4. 6.	Wood density in various types of forests	Unites /m²	Forestry and Hunting Inspectorate - Ministry of Agriculture, Forestry and Water Economy PE Macedonian Forest
4. 7.	Flooded area by type (agricultural land, forests and settlements)	ha flooded area / year	Crisis Management Centre Forestry and Hunting Inspectorate - Ministry of Agriculture, Forestry and Water Economy

SECTOR: AGRICULTURE

Indication	Subsector	Activity data	Authority/Organisation in charge
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Indication	Subsector	Activity data	Authority/Organisation in charge
5. 1.	Fertilizer used for specific types agricultural area:	t/ha	Ministry of Agriculture, Forestry and Water Economy
	ochards-plantations		
	pastures and meadows		
	organic production		
	emission factors		
5. 2.	Substantial crops production quantity by statistical regions and crop residues by statistical regions	kg/ year	Ministry of Agriculture, Forestry and Water Economy State Statistical Office
		0.4.1.1.1	A. C. H.
5. 3.	Content of dry material from burning crop residues	Content of dry material fractions	Ministry of Agriculture, Forestry and Water Economy
5. 4.	Data on nitrogen fixing crops	kg/ha	Ministry of Agriculture, Forestry and Water Economy
5. 5.	Applied limestone/dolomite on agricultural soils	t/ha	Ministry of Agriculture, Forestry and Water Economy
5. 6.	Data on the amount of produced organic fertilizer after deposition and purification process (anaerobic lagoons; liquid systems; storage of dry material and dry surfaces; other systems) for each category of livestock: cows, cattle, buffaloes, pigs, sheep, goats, horses, poultry	Nex, AWMS (%) kg organic fertilizer produced / annually and % of deposition and treatment/ by category	Ministry of Agriculture, Forestry and Water Economy
5. 7.	Number of livestock: cows, cattle, buffaloes, pigs, sheep, goats, horses, poultry	number/year	State Statistical Office Ministry of Agriculture, Forestry and Water Economy Agency for Food and Veterinary Services Public Enterprise for Pasture Management

Indication	Subsector	Activity data	Authority/Organisation in charge					
5. 8.	Information about other animals, (e.g. rabbits, for subcategories of different livestock by types)	number/year	State Statistical Office Ministry of Agriculture, Forestry and Water Economy Agency for Food and Veterinary Services					
5. 9.	Surfaces under organic production - meadows and pastures and arable agricultural land	ha/year	State Statistical Office Ministry of Agriculture, Forestry and Water Economy Agency for Food and Veterinary Services					

ANNEX II. Format for the submission of information on policies and measures pursuant to Article 4 hereof

Table 1: General description of policies and measures

r measure	മ							measure or policy of the Republic of North Macedonia		period resp		impleme	responsible for		Indicators used to monitor and evaluate progress over time Value (11)			or and	Reference to assessments and technical reports they are based on		
Ordinal number of the policy or measure	Name of the policy and measure	Sector(s) affected (1)	GHG(s) affected (2)	Objective (3)	Quantified objective (4)	Short description (5)	Type of policy instruments (6)	Union policy (7)	Policy of the Republic of North Macedonia (8)	Status of implementation (9)	Start	Finish	Type of entity	Name	Description	Year	Year	Year	Year	Reference to assessments and	-

Notes: abbreviations: GHG = greenhouse gas; LULUCF = Land Use, Land-Use Change and Forestry

⁽¹⁾ Sectors affected means one of the following sectors: energy supply (comprising extraction, transmission, distribution and storage of fuels as well as energy and electricity production), energy consumption (comprising consumption of fuels and electricity by end users such as households, services, industry and agriculture), transport, industrial processes (including industrial activities that chemically or physically transform materials leading to GHG emissions, use of GHG in products and non-energy uses of fossil fuel carbon), agriculture, forestry/LULUCF, waste management/waste, cross-cutting, other sectors.

⁽²⁾ GHG(s) affected means one of the following GHGs: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFC), perfluorocarbons (PFC), sulphur hexafluoride (SF6), nitrogen trifluoride (NF3).

(3) In the column »objective« one of the following objectives must be selected (it is possible to select more than one objective, it is possible to add additional objectives and list them under »Other«:

For energy supply – increase in renewable energy; switch to less carbon-intensive fuels; enhanced non-renewable low carbon generation (e.g. nuclear); reduction of losses; efficiency improvement in the energy and transformation sector; carbon capture and storage; control of fugitive emissions from energy production; other energy supply.

For energy consumption – improvements of energy efficiency of buildings; improvements of energy efficiency of appliances; energy efficiency improvement in the services/tertiary sector, efficiency improvement in the industrial and end-use sector, demand management/reduction; other energy consumption.

For transport – efficiency improvements of vehicles, shift to other modes of transport such as public transport or non-motorised transport; low carbon fuels/electric cars; demand management/ reduction; improved behaviour; improved transport infrastructure; other transport.

For industrial processes – installation of abatement technologies; reduction of emissions of fluorinated gases; replacement of fluorinated gases with other substances; improved control of fugitive emissions from industrial processes; other industrial processes.

For waste management/waste – demand management/reduction; enhanced recycling; enhanced CH4 collection and use, improved waste treatment technologies; improved landfill management; waste incineration with energy recovery; improved wastewater management systems; reduced landfilling; other waste.

For agriculture – reduction of the use of artificial fertilizers/manure on cropland, other activities improving cropland management, improved livestock management, improved animal waste management systems; activities improving grazing land or grassland management, improved management of organic soils; other agriculture.

For forestry/LULUCF – afforestation and reforestation; conservation of carbon in existing forests, enhancing production in existing forests, increasing the harvested wood products pool, enhanced forest management, prevention of deforestation, strengthening protection against natural disturbances, substitution of GHG intensive feedstocks and materials with harvested wood products; prevention of drainage or rewetting of wetlands, restoration of degraded lands, other within LULUCF.

For crosscutting – framework policy, multi-sectoral policy, other cross-cutting.

For Other a short description of the objective must be provided.

- (4) It is necessary to include the figure(s) if the objective(s) is(are) quantified (i).
- (5) In the description it should be indicated whether a policy or measure is foreseen in order to limit GHG emissions beyond the commitments that the Republic of North Macedonia has towards the international community.
- (6) It is necessary to select from the following policy types: economic; fiscal, voluntary/negotiated agreements, regulatory, information, education, research, planning, other.
- (7) Union Policy implemented through the transposition into and implementation of a national policy.
- (8) Secondary policy of the European Union: it is necessary to indicate all policies of the European Union that were not mentioned in the previous column or an additional policy of the European Union, if the national policy or measure relates to several policies of the European Union.

- (9) It is necessary to select from the following categories: planned, adopted, implemented, expired. Expired policies and measures need to be reported in the table only if they have an effect, or they are expected to continue to have an effect, on GHG emissions.
- (10) It is necessary to enter the name(s) of entities responsible for the implementation of the policy or measure under the relevant headings: Government of the RS, regional entities, local self-government, companies/businesses/industrial associations, research institutes, Other entities not mentioned previously (more than one entity can be selected).
- (11) It is necessary to provide all indicators that were used, as well as values for such indicators that are used to monitor and evaluate the progress achieved with policies and measures. Those values can be *ex-post* and *ex-ante* values, whereby the year for which the value applies must be specified.

Table 2: Available results of ex post assessments of the effects of individual or groups of policies on GHG emissions by sources and removals by sinks

Ordinal number of the policy or measure from Table 1 Name of the policy and measure from Table 1	
Policy imparinstallations aremissions act selected) (2)	
nd aircrafts (A) and other tivities (B) (both can be	
Year for which reduction applies	Ex-post assessr
Average emission reduction (kt CO2 equivalent per year)	ment
Explanation of the basis for the mitigation estimates	
Factors affected by the policy or measure	
Documentation/source of estimation, if available (provide a weblink of the report where the figure is referenced from)	link of the

Table 3: Available projected and realised costs and benefits of individual or groups of policies and measures that have effects on greenhouse gas emissions by sources and removals by sinks

	Projected cost	ts and benefits					Realized costs and benefits						
Ordinal number of the policy or measure from Table 1	Costs in EUR per tonne of CO2 equivalent reduced/seq uestered	Absolute costs per year in EUR (specify the year for which the costs have been calculated)	Description of cost estimates (basisfor cost estimate, what types of costs are included in the estimate, methodology)	Year based on which the price was set	Year for which the calculation is done	Documentatio n/source of cost estimation	Costs in EUR per tonne of CO2 equivalent reduced/seques tered	Year based on which the price was set	Year for which the calculation is done	Description of cost estimates (basis for cost estimate, what types of costs are included in the estimate)	Documentat ion/source of cost estimation		