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Content

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Full text in 34 articlespromulgated by Presidential Order Hua-Tsung-Yi-Yi-

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Content: Chapter 1 General Principles

Article 1 Climate change concerns have led to the passage of theGreenhouse Gas Reduction and Management Act, establishingstrategies to reduce and manage greenhouse gas emissions, strengthen environmental justice, andthe shared responsibility of environmental protection and national development.

Article 2 The Executive Yuan's Environmental Protection Administration is the central competent authority at the central government level, while municipal governments execute authority at the county or city level.

Article 3 This glossary of terms are to be interpreted with the following meanings:

- 1. Greenhouse Gas(GHG) refers to the following substances: carbon dioxide(CO2), methane (CH4), nitrous oxide (N2O), hydro fluorocarbons (HFCs), perfluorocarbons(PFCs), sulfur hexafluoride (SF6), nitrogen trifluoride (NF3), and others designated by the central competent authority.
- 2. Climate change adaptation means responses to actualor expected climate stimuli and their effects, which moderate harm or exploit beneficial opportunities. Adaptation may include "preventive and/or responsive actions," "private and/or public actions" and "autonomous and/or programmatic" adaptations.
- 3. GHG emission source (Emission Source) means any unit or process that directly or indirectly releases GHG into the atmosphere.
- 4. Global-warming potential (GWP) measures how much heat a GHG traps in the atmosphere. It compares the amount of heat trapped by the gas when compared to a similar mass of carbon dioxide. GWP is calculated over a specific time interval, commonly 20, 100, or 500 years. GWP is expressed as a factor of carbon dioxide (whose GWP is standardized to 1).
- 5. Greenhouse Gas Emissionsarethe sum of different GHG emissions and their corresponding GWPs, which shall be described by CO2equivalent (CO2e).
- 6. Entity means alegal person, non-corporate representative or manager, institution, or others who have Emission Sourcesdesignated by the central competent authority.
- 7. Carbon sink means any process or mechanism which removes a GHG from the atmosphere such as trees, forests, soils, oceans, stratum, facilities, or other sites.
- 8. Net quantity of the carbon sink means the net quantity of GHG removed from the atmosphere. This quantitycan include GHG removed from the Emission Source or atmosphere due to sequestration.
- 9. Mitigation means any intervention to reduce the

sources or enhance GHG sinks

- 10. "Low-carbon green growth" means greeneconomic development that boosts greening of existing industries, energy conservation, carbon emission reduction, developing green energy, and R&D into low-carbon energy technologies.
- 11. Emission Intensity is the average emission rate of GHGper equipment/product/other specified unitfrom a source, which is described by CO2e.
- 12. Offset means the use of reduction credits to compensate for or deduct emissions made elsewhere by an entity.
- 13. GHG Early Action Project (Early Action) refers to an offset project proposed by the owner, user or supervisor of the Emission Sources before enactment of the Act in compliance with the emission intensity designated by the central competent authority.
- 14. Validation means the review of a GHG Offset Project to ensure the project design document complies with regulations under this Act.
- 15. GHG Offset Project refers to a project created to earn reduction credits. The project design document shall be validated by the verification body and approved by the central competent authority. Documents must indicate all the facilities, raw materials, items and activities directly associated with the emission reduction or sink enhancement.
- 16. GHG emission performance standard (EPS) is a benchmark set by the central competent authority in conjunction with the central industry competent authority according to the facilities, products or input/output units of the specific sectors or Emission Sources.
- 17. Cap means the total permitted amount of emissions for a certain period of time under the cap-and-trade scheme.

 18. Allowance trading means to exchange emission allowances domestically or internationally in compliance with the designated cap under the cap-and-trade scheme.

 19. Emission allowance means the allowance distributed by designated authorities from government allocation, auction, sale, Early Action, GHG Offset Project, EPS or allowance trading under the cap-and-trade scheme. One unit of emission allowance equals to one metric ton of CO2e.
- 20. Periodic regulatory goalmeans a goal of GHG emission for a certain period of time based on national GHG reduction action plan.
- 21. Verification is an independent assessment by interview, document review, data analysis, inspection or test to determine the validity and reliability of the GHG inventory and emission reduction (and sink) by the verification body.
- 22. Accounting is a process to collect, calculate and analyze emissions or sinks.
- 23. Registration means reporting emissions, sinks, allocations, reductions, auctions, sales or transactions of CO2e to the national registry (Registry) designated by the central competent authority.
- 24. Allocated emission allowance (allowance) is an emission allowance issued to an Emission Source for a specific period of time by the central competent authority in conjunction with the central industry competent authorities.
- 25. Sold allowance (sale) is an emission allowance sold to an Emission Source at a fixed price from the central competent authority.

- 26. Holding account is an account created by the central competent authority to track an Emission Source's emissions, and transactions of allocations, auctions, sales or reduction credits.
- 27. Carbon leakage means implementation of cap-and-trade scheme may result in relocation of energy-intensive production in less-constrained regions.
- 28. "Best Available Technology" (BAT) is a commercial technology that provides the greatest reduction in GHG emissions after taking into consideration energy, economic, and environmental impacts.
- Long-term national GHG emission reduction goal shall be Article 4 to reduceGHG emissions tono more than 50% of 2005 GHG emission by 2050.

The goal pursuant to the foregoing Paragraph shall be timely adjusted by the central competent authority, in consultation with the central industry competentauthorities, by taking into consideration the United Nations Framework Convention on Climate Change (UNFCCC), its agreements andor related international conventions decisions, together with domestic circumstances, subject to the Executive Yuan's approval; and in line with the required periodical review.

- The national government shall ensure the sustainable Article 5 utilization of the nation's resources, maintain balanced energy supply and demand, mitigate and respond to the impacts of climate change, and place balanced emphasis on environmental protection, economic development, and social justice.
 - All levels of government shall encourage technological innovation, research and development, enhance financial mechanisms, spur economic momentum, encourage competition, promote low-carbon green growth, create employment opportunities, and boost national competitiveness.

In order to respond to the impact of climate change, the government shall uphold the following legal and policy principles:

- 1. To ensure the nation's energy security, the government shall draft mid-to long-term strategies for gradually reducing dependence on fossil fuels with a mid-to long-term aim of renewable energy policies, and the gradual realization of a nuclear-free homeland.
- 2. In line with the "user charge" principle of environmental justice, the free allowances allocation method will be gradually replaced by allowances sold at a fixed price.
- 3. To respond to the impact of climate change, under the principle of equality and social welfare promotion, the government should implement taxmechanisms on imported fossil fuels based on carbon dioxide equivalent.
- 4. The government should actively help traditional industries achieve energy conservation and carbon reduction ortransition, develop green technology and green industry, create new employment opportunities and green economies, and promote a low-carbon, green growth plan for the nation's infrastructure.
- 5. In order to lessen environmental pollution and GHG emissions, the government should promote resource use efficiency, energy use efficiency, and resource recycling.
- GHG management programs and plans shall comply with the Article 6 following principles:
 - 1. National reduction targets and schedule shall seek to realize the common but differentiated responsibilities

specified in UNFCCC, while also furthering the sustainable development of the nation's environment, economy, and society.

- 2. The determination of sector-based periodic regulatory goals shall take cost effectiveness into consideration, and strive to achieve GHG reductions at the lowest possible cost.
- 3. The government shall actively adopt preventive measures, seek to forecast, avoid, or reduce the causes of climate change, and mitigate the adverse effects of climate change.
- 4. The government shall actively strengthen international cooperation, and strive to maintain the international competitiveness of domestic industries.
- Article 7 The competent authorities and industrycompetent authorities may mandate qualified organizations to conduct investigation, verification, consultation, training, and research regarding climate change adaptation and GHG mitigation.
- Chapter 2 Authority and Responsibility of Government Agencies

 Article 8 The Executive Yuan shall invite relevant central government agencies, non-governmental organizations, experts and scholars to determine and review the division, integration, implementation and compilation of the work of GHG reduction and climate change adaptation.

 Relevant central government agencies shall promote GHG reduction and climate change adaptation through the following actions:
 - 1. Development of renewable energy and energy technology.
 - 2. Improvement of energy efficiency and energy conservation.
 - 3. Reduction in GHG emissions by industrial sectors.
 - 4. Transportation management, development of mass transit systems, and reduction in GHG emissions by other transportation sectors.
 - 5. Implementation of low carbon energy transportation.
 - 6. Reduction and management of GHG emissions from buildings.
 - 7. Waste recycling and reuse.
 - 8. Forest resource management, biodiversity conservation, and strengthening of forests' carbon sequestration.
 - 9. Reduction and management of GHG emission from agriculture and guarantee of food security.
 - 10. Green finance and GHG reduction incentive mechanisms.
 - 11. Assessment of impact of GHG reduction on the economy as a whole and planning of response measures.
 - 12. Establishment of GHG cap-and-trade scheme including allocation, auction, allowance sale, trade, and facilitation of international emission reduction cooperation mechanism.
 - 13. Research, development and implementation of GHG reduction technologies.
 - 14. Study of international GHG conventions and laws and participation in international conferences.
 - 15. Development and implementation of matters connected with climate change adaptation.
 - 16. Education and advocacy of climate change adaptation and GHG reduction.
 - 17. Other climate change adaptation and GHG reduction matters.
 - Article 9 In order to implement the nation's GHG reduction policy, the central competent authority shall develop a National Climate Change Action Guideline ("Action Guideline") and

GHG Reduction Action Plan ("Action Plan") reflecting the nation's economy, energy supplies, environment, current international situation, and the assignment of responsibilities mentioned in Paragraph 1 of the previous Article, and shall implement the ActionGuideline and Action Plan in consultation with the central industry competent authorities after requesting approval from the Executive Yuan.

The ActionGuideline pursuant to the foregoing paragraphshall be reviewed once every five years; the Action Plan shall includeperiodic regulatory goals, implementation timetables, implementation strategies, expected benefits and an evaluation mechanism. The central industry competentauthorities charged with the nation's energy, manufacturing, transportation, residential and commercial, and agriculture sectors shall determine GHG Emission Control Action Programs for the sectors under its supervision on the basis of the Action Plan pursuant to the foregoing paragraph; the Action Programs shall include GHG emissions target, timetables, and economic incentive measures.

Article 10

The central industry competent authorities shall regularly review and revise the Action Programs on the basis of changes in the industry and energy supply and demand and deliver an annual report on the implementation of GHG emissions targetand shall propose improvement plans if failing to meet emission targets. Implementation, revision, improvement plans and annual reports of Action Programs pursuant to the foregoing paragraphshould be submitted to the Executive Yuan for approval.

Article 11

Regulatory goals will be set in stages on a five-year basis. The central competent authority shall invite scholars, experts, and non-governmental organizations, in conjunction with the central industry competent authorities, to form an advisory committee to set the regulations for the goals and regulatory approaches. The central competent authority shall, in consultation with the central industry competentauthorities, set for each stage' sregulatory goal pursuant to the foregoing regulations. Eachstage's regulatory goal shall be submitted to the Executive Yuan for approval after public hearings are held.

Apart from the regulatory goalfor the first stage, the regulatory goals shall be set two years ahead of the beginning of each respective stage.

Article 12

After the regulatory goals for each stage have been approved, the central competent authority shall compile their status and report to the Executive Yuan annually. Implementation of the regulatory goals shalltake into account the following matters and make necessary adjustments upon the Executive Yuan's approval:

- 1. Scientific knowledge concerning climate change and relevant technologies.
- 2. The state of economic and industrial development.
- 3. Fiscal and social conditions.
- 4. Energy policy.
- 5. UNFCCC and its agreements, or relevant decisions made under international conventions.
- The central industry competent authorities shall survey Article 13 emission, compile relevant statistics, develop climate change adaptation strategies, and regularly submit survey, statistics, and adaptation results to the central competentauthority annually. The central competent authority shall assess climate change impact, compile national emissions statistics,

and establish a national GHG emissions inventory; the central competent authority shall compile a national GHG report every three years for submission to the Executive Yuan whose approval will then pave the way for release to the general public.

The industry competent authorities shall assist entities Article 14 in the accounting of emission sources, verification, registration, reduction, and participation in domestic or international offset projects.

> Special municipality, county and city competent authorities shall develop GHG control implementation plans in accordance with the Action Plan approved by the Executive Yuan and the Action Program determined by the central industry competent authorities; such implementation plans shall be finalized after requesting the approval of the central competent authority in consultation with the central industry competent authorities.

Emission Sources designated by the central competent Article 16 authority shall conduct annual accounting and registration to their holding accounts in the Registry by the deadline. The GHG inventory and relevant information shall be verified by a verification body at least once every three years.

> The verification body pursuant to the foregoing paragraph shall be internationally recognized or establish a domestic branch office. Before operating validation and or verification business in accordance with the Act, the verification body must apply and acquire accreditation certificate and permit by the central competent authority or its appointed accreditation body.

The regulations governing verification body permits include prerequisite application, review processes, granting, withdrawal, revocation, as well as prerequisite for dedicated personnel shall be specified by the central competent authority. The regulations governing appointed national accreditation body shall be specified by the central competent authority. The regulations regarding accounting of GHG emissions, reporting elements, frequency, and verification process, emissions source account and other requirements of emission sources mentioned in foregoing paragraph, are determined by the central competent authority.

The central competent authority may establish a GHGEPS Article 17 to incentivized esignated Emission Sources to reduce GHG emissions prior to the cap-and-trade scheme. The EPS pursuant to the foregoing paragraph shall be determined and reviewed regularly by the central competent authority in conjunction with the central industry competent authorities, considering facilities, products or other raw materials, output, and consumptions of Emission Sources.

> The central competent authority shall implement the domestic cap-and-tradescheme by considering the UNFCCC and its agreements, or relevant international conventions decisions in response to international GHG reduction requirements. After implementing accounting, verification and registration as well as establishing regulations of allocation, offset, auction, sale and allowance trading, the cap-and-trade scheme shall be implemented by the central competent authority in consultation with the central industrial competent authorities upon approval

Chapter 3 Emission Reduction Measures

Article 15

Article 18

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by the Executive Yuan.

Article 19

The central competent authority shallestablish the GHG Management Fund (Fund) from the following sources:

- 1. Proceeds from allowances auctioned or sold pursuant to the foregoing Article;
- 2. Fees collected pursuant to Article 21;
- 3. Government grant via budget appropriation;
- 4. Revenues collected under fines and penalties prescribed in the Act;
- 5. Money received from persons, liable entities or organizations; and
- 6. Other incomes.

The Fund shall serve the following purpose only for GHG emissions reductions and adaptation to climate change:

- 1. Reduce GHG emissions:
- 2. Inspect emission sources:
- 3. Provide emission sources with assistance, subsidies and grants for voluntary efforts to reduce GHG emissions:
- 4. Administrative affairs of holding accounts establishment in the Registry, auctions, sales and allowance trading;
- 5. Employ staff to carry out administrative services;
- 6. Coordinate, plan and implement adaptation to climate change;
- 7. Educate, promote, and award grants;
- 8. Conduct international affairs;
- 9. Carry out research and analysis.

Special municipalities, counties and cities shall be subsidized for activities pursuant to the foregoing paragraph no less than 30 percent of the net proceeds collected from allowances auctioned or sold for a fixed price pursuant to Paragraph 1 minus the administrative costs and fees incurred.

The ratios and distribution methods of subsidies pursuant to theforegoing paragraph shall be determined and reviewed regularly by the central competent authority, after consultation with municipalities or county (city) governments, considering population, geographical area, and relevant factors.

Pursuant to Paragraph 1, the central competent authority may establish a committee supervising the operation of the Fund in accordance with regulations specified by the Executive Yuan regardingrevenues, expenditures, safeguard, and utilization.

Article 20

The central competent authority shall announce the designated EmissionSources which are included in the cap-and-trade scheme, apply aggregate cap limits of each compliance period, take into account factors including trade intensities of the various sectors, the costs affected by the cap-and-trade program to prevent carbon leakage which may compromise the international efforts to reduce GHG emissions and overall national competitiveness. The central competent authority shall allocate emission allowances to entities freely, through auctions, or for a fixed price.

The percentage of the emission allowances on sale shall be determined by regulatory goals in stages and gradually increased to 100%.

The percentage of sales pursuant to the foregoing paragraph may be adjusted by the tax mechanisms imposed on imported fossil fuels.

The central competent authority shall allocate emissions allowances to public utilities, excluding GHG emissions related to energy generation provided to emission sources for consumption as the indirect GHG emissions in CO2e.

The central competent authority may reserve partial allowances, and may allocate for designateentities with specific scales of new entrants or modified Emission Sources which adopt the designated BAT.

The central competent authority shall retire the emission allowances returned from Emission Sources upon closure, parmenent shutdown or dissolution, and the

closure, permanent shutdown or dissolution, and the ownership of emission allowances shall not be transferred. In the case that Emission Sources cease operation, the central competent authority shall execute administrative discretion regarding the disposition, if necessary, retirement of emission allowances. The central competent authority shall work in conjunction with the central industry competent authority to determine regulations regarding the allowance of the entity, the eligibility, approach and processes of allocation, the approaches of auction or sale, revocation and termination of emissions allowances; Pursuant to Paragraph 4, the reserve of emission allowances, specific scale of new or modified Emission Sources, the designated BAT, the process of ceasing and resuming operation of Emission Sources and

Emission Sources, the designated BAT, theprocess of ceasing and resuming operation of Emission Sources and the impact recognition of carbon leakage to the overall national competitiveness and other requirements.

GHG emissions of an entity over a period of time specified by the central competent authority, along with

emissions allowances procured, shall not exceed the amount of allowance available to meet the compliance obligation in the entity's account upon compliance deadline obligations determined by the central competent authority.

Before the deadline for compliance obligations determined by the central competent authority, an entity may procure emissions allowances from the Early Action, Offset Project, EPS, carbon trading, or other approaches to register in its holding account to offset the amount of GHG emissions in excess of the emissions allowances for an entity. Prior to the deadline for surrender of compliance obligations, the remaining emissions allowances not used for offsetting the excess emissions cannot be traded before verification.

The procurement of reduction credits from the Offset Project and allowance trading pursuant to the foregoing paragraph shall give priority to domestic efforts. The central competent authority, in consultation with the central industry competent authorities, shall make regulations of emissions credits procured from external GHG trading schemes by taking into consideration the United Nations Framework Convention on Climate Change (UNFCCC), its agreements andor related international conventions decisions, as well as factors that include but are not limited to, energy efficiency, domestic emissions allowances and the long-term national GHG emission target. For the purpose of meeting a compliance obligation to offset the excess emissions, an entity may surrender reduction credits procured from external GHG trading schemes recognized by the central competent authority by up to ten percent of the entity's total allowances.

The verification bodies which provide verification services related to international reduction credits shall be recognized by the associated mechanisms of UNFCCC or the central competent authority. The regulations regarding administration of emission source accounts, and the registration and surrender of emissions allowances pursuant to Paragraph 1; regarding

Article 21

the eligibility, procedure, proceeds and other requirements specified pursuant to Paragraphs 2 and 4, are determined by the central competent authority, in consultation with thecentral financial authorities.

Article 22 GHG Offset Project operators may request the central competent authority to issue reduction credits representing emission reductions including carbon sinks verified by verification bodies.

The central competent authority shall register the issued reduction credits, along with eligibility conditions for use and expiry date, to the respondent holding accounts in the Registry for those who participate in the Early Action, the GHG Offset Projects, EPS and are not under the cap-and-trade scheme but with voluntary emission reductions.

but with voluntary emission reductions. The regulations regardingthe Offset Project, Early Action, EPS, voluntary reduction action of emissions sources not covered under the cap-and-trade scheme and other requirements pursuant to Paragraphs 1 and 2, the central competent authority shall be in consultation with the central industry competent authorities to determine the criteria of reduction actions, prerequisites, process of application, review, and approval as well as the calculated methodology from emission reduction towards emission allowances, requirements of validation and verification, eligibility conditions and expiry date for reduction credits, and usage limit of reduction credits.

Article 23 The competent authorities or the industry competent authorities may direct officers, with credentials or proof of authorization presented, to conduct a site visit for the purposes of inspecting an Emission Source' sfacility operation or requesting relevant information. Emission Sources owners, operators or managers shall not evade this request.

Chapter 4. Education and Grants

- Article 24 All levels of government shall promote public awareness of climate change mitigation and GHG reduction among citizens, schools and industries, proactively assistingnon-governmental organizations in the following manner:
 - 1. Develop and promote education plans on climate change and its impact;
 - 2. Provide the public with easy access to relevant information about climate change;
 - 3. Engage industries and the public about relevant measures based on local conditions;
 - 4. Train scientific, technological and managerial personnel;
 - 5. Encourage research in combination with environmental education on climate change;
 - 6. Promote energy saving and enhance energy efficiency;
 - 7. Support low-carbon products by establishing a carbon-labeling plan;
 - 8. Execute other actions officially announced by all levels of government.
- Article 25 All levels of government, public education institutions and government-run enterprises shall promote energy saving and use energy-efficient products or services to reduce GHG emission.
- Article 26 Electricity suppliers and distributors shall encourage energy conservation and energy efficiency amongst customers.
- Article 27 The central competent authority and central industry

competent authorities shall reward well-performing facilities, enterprises, schools, organizations or individuals with grants or subsidies.

Conditions, criteria and selection processes for such grants or subsidies shall be determined by the central competent authority or central industry competent authorities.

Chapter 5. Penalty Provisions

Article 28 When an entity fails to surrender designated amount of allowances within deadline and therefore violates
Article 21, Paragraph 1, a monetary penalty of threetimes carbon market price per metric ton within a maximum of NT\$1,500 per metric ton.
The central industry competent authorities set the

the central competent authorityshall, in conjunction with the central industry competent authorities, set the aforementioned carbon market price and review regularly, taking into consideration domestic and international carbon market trading price.

Article 29

The owner, user, or manager of a covered Emission Source with inventory and registration obligation pursuant to Article 16, Paragraph 1, or with registration obligation pursuant to Article 21, Paragraph 2, shall be subject to a fine from NT\$200,000 to NT\$2,000,000 when the person provides information that the person knows to be false. In addition to the monetary penalty, the person shall make corrections within a prescribed period of time, and the amount of allowances equal to the registered false information shall be subtracted from the next allocation. Failure to correct within the prescribed period of time will result in monetary penalty, fined each time an offense occurs. Under severe circumstances, a person may be charged with suspension of operation or business, and be constrained or prohibited from trading. The prescribed period of time as mentioned shall not exceed 90 days.

Article 30

The owner, user, or manager of an Emission Source who evades, impedes, or refusesinvestigation or information request from the competent authorities pursuant to Article 23 shall be subject to a fine fromNT\$200,000 to NT\$2,000,000. The competent authoritiesmay fine each time an offense occurs.

Article 31

Verification bodies in violation of Article 16, Paragraph 2 regarding qualification conditions, permit, and verification rules shall be subject to a fine fromNT\$100,000 to NT\$1,000,000, and shall make corrections within a prescribed period of time. Failure to correct within the prescribed period of time will result in monetary penalty each time an offense occurs. The owner, user, or manager of an Emission Source in violation of Article 16, Paragraph 3, regarding inventory, registration content and registration time, shall be notified to make improvements within a prescribed period of time. Failure to improve within the prescribed period of time will result in a fine fromNT\$100,000 to NT\$1,000,000. The personwill then be notified again to make improvements within a prescribed period of time. Failureto improve within the prescribed period of time thereafter will result in monetary penalty each time an offense occurs. The prescribed period of time as mentioned in Article

31, Paragraphs 1 and 2 shall not exceed 90 days.

Emission Source or entity in violation of Article 21,
Paragraph 6 regarding qualified trading entity or
applicable methods, or in violation of Article 23,
Paragraph 3, regarding user condition or deadline, shall
be subject to a fine from NT\$100,000 to NT\$1,000,000 and

Article 32

shall make corrections within a prescribed period of time. Failure to correctwithin the prescribed period of time will result in restriction or suspension of trading.

The prescribed period of timeshall not exceed 90 days.

Chapter 6. Supplementary Provisions

Article 33 The enforcement rules of this Act shall be determined by the central competent authority.

Article 34 This Act shall enter into effect on the date of promulgation.

Files: Greenhouse Gas Reduction and Management Act.odt

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