

FINAL REPORT ON ENABLING ACTIVITIES FOR HFC PHASE-DOWN IN ALBANIA

I. Background

The 28th Meeting of the Parties to the Montreal Protocol in October 2016 held in Kigali, Rwanda agreed on the amendment to phase down hydrofluorocarbons (HFC). The amendment laid out HFC phase down goals for Article 5 countries and put in place the implementation mechanism. The Kigali Amendment entered into force in January 2019. This Enabling Activity project (UNIDO ID 170248/MLF Inventory: ALB/SEV/80/TAS/01+) has been approved by the 80th Executive Committee Decision 80/50. UNIDO has assisted the National Ozone Unit of Albania to implement its hydrochlorofluorocarbons (HCFC) phase out management plan (HPMP-Stage I, UNIDO ID: 105005). This Enabling Activity (EA) project leveraged on the work in progress by the HPMP Stage I project where relevant.

II. Project objectives and expected outputs

The overall objective of this EA project is to facilitate the early ratification of the Kigali Amendment and put in place national strategies to implement action plans in the prioritized area for the country. The project is comprised of the following components:

1. Support for the early ratification of the Kigali Amendment;
2. Support to the institutional arrangements;
 - ✓ Review of the licensing systems;
 - ✓ Review of the data reporting systems;
 - ✓ Review of Safety standards
 - ✓ Review of energy efficiency regulations and policies.
3. Preparation for national strategies.

The table below shows the overall scope and objectives of the enabling activities, including the expected outputs of each activity:

Activities to facilitate	Activities and	Target group	Milestones	Expected outputs
--------------------------	----------------	--------------	------------	------------------

	Coordination with Government representatives	Related ministries and legislators	One meeting with ministries' representatives and legislators conducted	Roles and tasks for the ratification of the amendment distributed among relevant stakeholders (fully achieved)
	Supporting national ratification instruments	Related Ministries and Legislators	Supporting documents distributed among ministries and legislators	Legislators have all necessary documents and knowledge for the vote on the amendment' s ratification (fully achieved)
Support to the institutional arrangements and legal framework	Coordination with Government representatives and relevant institutions	Related ministries and institutions	One meeting with representatives of Ministries and other related institutions conducted	Roles and tasks distributed among relevant institutions (fully achieved)
	Review of licensing systems	Related ministries and institutions; Servicing sector	One meeting with ministries' representatives and other stakeholders conducted	A proposal for updating licensing system prepared and presented (fully achieved)
	Review of the data reporting systems	Related ministries and institutions; Servicing sector	One meeting with ministries' representatives and other stakeholders conducted	A proposal for updating data reporting systems prepared and presented (fully achieved)
	Review of operating codes and standards for the correct and efficient use of HFCs and ODS alternatives in the entire value chain	Relevant ministries; Servicing sectors	A workshop delivered with relevant ministries; A report published on	A proposal for updating codes and standards prepared and presented

			this topic	(fully achieved)
	Energy efficiency	Related ministries and institutions; Servicing sector	One meeting with ministries' representatives and other stakeholders conducted	A proposal for updating data reporting systems prepared and presented (fully achieved)
Preparation for national strategies	Identification of appropriate policies and regulations, including HCFC phase-out strategies, to facilitate the phase-down of HFCs and the introduction of low-GWP alternative technologies – inclusive “not-in-kind” options – with higher rates of energy efficiency	Relevant ministries --- Customs --- Private sector (refrigeration and air-conditioning manufacturing, servicing sector, aerosols)	Workshop delivered --- A report published on this topic	Feasible policies and regulations identified (fully achieved)

III. Description of activities implemented and summary of results for each

1. Support for the early ratification of the Kigali Amendment

1.1 Coordination with Government representatives

The National Ozone Unit (NOU) has been engaged as a coordination actor with the Ministry of Tourism and Environment, the Ministry for Europe and Foreign Affairs and the Ministry of Justice, acting jointly for all the tasks, documents and supporting documents relevant for the ratification process of the Kigali Amendment.

The ratification process has been facilitated by the National Ozone Unit as a coordinating actor, jointly with all the stakeholders engaged in this process. The following overarching pillars and activities have been implemented:

- Identifying and developing an accurate list of stakeholders such as:
 - Ministry of Tourism and Environment
 - Ministry for Europe and Foreign Affairs
 - Ministry of Justice
 - Ministry of Finance
 - Parliament of Albania

- Initial assessment of the legal and institutional framework for implementation and compliance, aimed to identify the mandatory and required steps, documents and institutions involved in the ratification process;
- Coordination with the government representatives and other related institutions;
- Identifying and developing of a list of national ratification instruments, preparing and signing the instruments of ratification;
- Organizing high level official meetings (i.e. with the Minister of Tourism and Environment, Parliamentary Committees) and meetings with stakeholders;
- Completed consultation with the stakeholders and parties interested in the implementation of the Kigali Amendment (law enforcement officers);
- Awareness raising activities specifically drafting, preparing and distributing briefing note of Kigali Amendment (in Albanian Language) outlining the landmark achievements of the Montreal Protocol and benefits of becoming a party of the Kigali Amendment with the aim to ensure understanding the obligations arising as a party to the amendment and benefits;
- Follow up process with all the Ministries involved in the process of Ratification.

In May 2018, the National Ozone Unit team in cooperation with national consultants organized assessment and information meetings to discuss and define the mandatory and legislative process required for the ratification process, law drafting process and the pertinent institutions and documents. For this purpose, the following official meetings were arranged:

Project team kick off meeting on May 3, 2018	This meeting clarified the roles and responsibilities of the project team: NOU Coordinator, EA Project Coordinator, Legal Consultant, and NOU Assistant
Internal meeting at Ministry of Tourism and Environment on 8 May 2018	This internal ministry meeting reviewed and assessed the ratification instruments, tasks, documents, and procedures, participated by NOU Coordinator, National Consultant, General Director and officers from the Environment Development Programme Directorate, and Legal Directory.
Internal meeting with High rank officials of the Ministry of Tourism and Environment on 10 May 2018	The meeting introduced the benefits and impacts of the Kigali Amendment, required documents, legal requirements, recommendations of the Ozone Secretariat and scheduled timeline of the ratification process.
High official meeting between Ozone Secretariat, Ministry of Tourism and Environment and the Parliament of Albania on 17 May 2018	The Ozone Secretariat representative met with the Minister of Tourism and Environment, and reiterated the global importance of the Kigali Amendment, commended on Albania Government's commitment, and necessary steps forward for its ratification, implementation and compliance, while facilitating a better understanding of the Montreal Protocol provisions and challenges.
A round table stakeholder workshop on 17 May 2018	The workshop was attended by participants representing 17 stakeholders including Ministry of Tourism and Environment, Refrigeration and Air-Conditioning Associations, General Directorate of Customs, national consultants and media. The purpose of the meeting

	<p>was to provide national stakeholders with a detailed report and overview of the Kigali Amendment, benefits for the country, main elements related to climate protection, energy efficiency and standards. The Ozone Secretariat representative presented a detailed paper and presentation on “The Kigali Amendment to the Montreal Protocol”, its achievements to date, status of ratification, how the Kigali Amendment will work, groups of countries specified in the decision, agreed on HFC phase down schedule, other Amendments specifics, exemption, entry into force requirements, key issues such as international standards, country driven approach , relationship with HCFC phase-out, funding issues, reduction of HFC consumption and production, energy efficiency safety standards, reasons to ratify, support to Article 5 countries, implication of ratifying, and ratification process. The second part of the round table was focused on the internal ratification process in Albania and detailed presentation was introduced underlining the steps undertaken at a nation level according to the Albanian Legislation, and achievements in the Ratification process for Albania.</p>
<p>The Ozone Secretariat representative’s meeting with the Parliament on 18 May 2018</p>	<p>The Ozone Secretariat representative met with Deputy Chairman of the Productive Activity, Trade and Environment Committee, Parliament of Albania. The importance of the Kigali Amendment was re-emphasized, underlining that there is no “one-size-fits-all” approach and a country’s choice will depend upon the national situation which includes legislation, standards, market availability, etc.</p>

1.2 Supporting national ratification instruments

The National Ozone Unit in cooperation with Ministry of Tourism and Environment has followed the stages of the legislative process below:

1. Preliminary drafting of the legal acts and related documents – the following documents has been prepared:
 - a) Official translation of the Kigali Amendment in the Albanian Language;
 - b) The explanatory memorandum to the law – this document explained the reasons for, and the context of the Draft Law on “The ratification of the Kigali Amendment”;
 - c) Draft Decision of Council of Ministers on the approval of the Law on “The ratification of the Kigali Amendment”;
 - d) Draft Law on “The ratification of the Kigali Amendment”;
2. Internal consultation among governmental authorities - the draft law had been submitted to the Ministry of Justice, Ministry of Finance and Economy, Ministry of Europe and Foreign Affairs, Ministry of Infrastructure and Energy, Ministry of Agriculture and Rural Development, Ministry of Health and Social Welfare, Ministry of Education, Sports and Youth for their comments and suggestions. A follow up process and timing had been established for each ministry.

3. Discussions and approval by the Council of Ministers - Draft law is submitted to the Council of Ministers for approval, prior to the introduction in the Assembly. ***The Council of Ministers approved the Draft Decision on the approval of the Law on "The Ratification of the Kigali Amendment" on November 7, 2018.***
4. Parliamentary process, discussion and approval - ***The Kigali Amendment was ratified by the Albanian Parliament with Law No. 91/2018, dated 03.12.2018 "The ratification of the Kigali Amendment".***
5. Promulgation by the President - the President of the Republic has the constitutional power and duty to promulgate the laws after receiving them from the Assembly. ***The President of the Republic of Albania promulgated the Law No. 91/2018 on December 18, 2018.***
6. Publication - according to Article 117 of the Constitution, the normative acts of the Council of Ministers and other central state institutions acquire legal effect only after they are published in the Official Journal. The texts of international treaties translated into Albanian must be published in the Official Journal. This requirement is mandatory for all international treaties. ***This Law was published in the Official Journal on December 21, 2018.***
7. Upon completion of the domestic legal procedures for entering into force of the agreement, parties have made the reciprocal notifications through diplomatic channel. This stage involves a follow-up process with the Ministry of Europe and Foreign Affairs. ***Albania has ratified the Kigali Amendment to the Montreal Protocol on January 18, 2019.***

In conclusion, organization of meetings and roundtables with high officials and representatives of different ministries and other institutions, dissemination of necessary information, discussion with stakeholders resulted in the ratification of the Kigali Amendment – the first country in the region to ratify the Kigali Amendment.

2. Institutional arrangements and legal framework

2.1 Coordinate among government institutions and stakeholders on the policies and action plans required for the ratification of the Kigali Amendment and its implementation

National Ozone Unit (NOU) has had close cooperation with the:

- a) Ministry of tourism and Environment – NOU's representatives participated in different meeting and working groups for drafting the legal acts related to ratification of the Kigali Amendment;
- b) Ministry of Europe and Foreign Affairs – Stages of the legislative process have been defined;
- c) Ministry of Justice – Official translation of the Kigali Amendment has been approved and all the related documents have been discussed and approved;
- d) Ministry of Infrastructure and Energy / Energy Efficiency Agency – Information on energy efficiency has been prepared and presented. Information on domestic safety standards for low-GWP flammable refrigerants was prepared and presented. Based on this information and the survey conducted by the national consultant, a general overview on standards adopted in Albania is prepared (Annex II)

- e) National Business Center – Licensing systems has been discussed and a proposal for updating licensing system has been prepared and presented;

2.2 Review of legal framework including licensing system, quota allocation and data reporting

Since June 2014, Albania is a candidate country for joining the European Union (EU). Once Albania becomes a member of the European Union, it would need to adjust its legislation to the EU Regulation on ODS which is directly applicable to all EU members. EU member states will also have to follow the new F-gas regulation (EC) 517/2014 which contains firm emission controls and it is introducing a phase-down schedule for hydrofluorocarbons (HFCs) which were commonly used as HCFC replacement as well as quotas for the placing on the market of HFCs (also containing in RAC equipment) among other measures.

Based on these premises, the main objectives of this component of the project was to develop a revised Montreal Protocol related policies & legislation in Albania, in response to the accelerated phase out of HCFCs, the Kigali Amendment and other Montreal Protocol issues, to inform stakeholders of the revised legislation through a consultative process, and to provide a set of recommendations on how to strengthen and harmonize relevant policies & legislation in Albania, in view of the Kigali Amendment to the Montreal Protocol.

The Council of Ministers has approved the Decision No. 865 dated 10.12.2014 “*On the reduction and stabilization of the Fluorinated Greenhouse gas emissions*” (hereinafter the “Decision 865”). This Decision transposes partly the F-Gas Regulation (EU) 517/2014. It stipulates the rules and procedures connected with prevention, restriction, usage, reclamation, and destruction of F-gases, conditions to place in market products and specific equipment that contain F-gases, and conditions for specific usage of F-gases.

Although the DCM 865 is considered an important regulatory act concerning reduction and stabilization of F-gases, Albanian legislation remains incomplete regarding this issue, due to the fact that Decision 865 fails to provide licensing and quota system for F-gases. Consequently, an updated and revised legislation is necessary, in order to allow the Albanian legislation to be in line with the Kigali Amendment.

The Kigali Amendment comes with provisions for capacity-building for developing countries, institutional strengthening and the development of national strategies to reduce HFCs and replace them with alternatives. The parties to the amendment have to put in place practical arrangements for its implementation, including licensing and quota systems for HFCs and new data reporting requirements and tools.

In this context, the consultant in cooperation with NOU carried out the activities as follows:

- Existing environmental legislation has been reviewed. A list of laws, decrees and/or decisions that need to be updated to fully support the legal framework required by the Kigali Amendment are finalized.
- A desk review of the relevant regulations and standards of the existing legislation in Albania in relation to (i) annual quota allocation on import of HFCs and (ii) requirements and procedures for HFC import licensing system has been conducted;

- Harmonized tariff codes were discussed with the customs according to HFCs commitments, with special attention to HFC blends.
- Data reporting on HFC consumption has been discussed during the meeting with stakeholders. The national ODS reporting mechanism is to be reviewed and revised to include HFC consumption with a particular focus on that of the servicing and informal sector.
- The meeting reports were circulated for review by stakeholders and finalized reflecting their feedback.
- A new legal act has been drafted, circulated, revised and submitted for the due process.

Two stakeholder meetings were organized to discuss the licensing system and quotes for HFCs as well as new tariff codes and data reporting.

The consultant in cooperation with NOU, organized the first stakeholder meeting on October 12, 2018 in Tirana, with the aim to analyse the required legal acts which needs to be revised and drafted in the context of implementation of the Kigali Amendment. The meeting was held with the participation of the representatives of the Ministry of Tourism and Environment, NOU, General Directory of Customs, National Business Centre, RAC associations, legal consultants and RAC consultants. The second stakeholder meeting was organized on April 5, 2019 in Tirana. The meeting participants were representatives of the NOU, Ministry of Tourism and Environment, NOU, General Directory of Customs, National Business Centre, RAC associations, legal consultants and RAC consultants.

A new legal act has been drafted, circulated, revised and submitted for the due process - Draft Law “On Fluorinated Greenhouse Gases” (hereinafter the “**Draft Law on F-gases**”). Below it is a brief review of the current F-gas legislation, Decision of the Council of Ministers No. 865, dated 10.12.2014 “On the Reduction and Stabilisation of Emissions of F-gases” along with the suggestions for the necessary revisions.

- Decision 865 fails to adequately define the related terms and concepts and contains errors in terminology - we recommend (and have done so in the Draft Law on F-gases) to add and adapt the main terms used in the EU regulation commission regulation (EC) No 517/2014 of the European Parliament.
- Decision 865 provisions related to the import and export of F-gases are inadequate and incomplete - we recommend that the imports should be based on the exemptions contained in the EU legislation.
- Lack of mandatory registration – no mandatory registration of importers of products and equipment’s containing/relying on F-gases is addressed by Decision No. 865. We recommend that such registration, along with all the reporting requirements must be addressed in the revised legislation.
- Vague “placing on the market” provisions - the placing on the market provisions are rather vague. Furthermore, we recommend that the approach for placing F-gases on the market has to match the provisions of the EU legislation.
- Mandatory Reporting - moreover, the mandatory reporting requirements currently present in Decision 865 (Chapter V) have to be fully developed in line with the EU legislation.

- Incomplete emission and leakage control provisions - we recommend that the Albanian legislation is amended to bring it closer to EU regulations and have proposed such revisions in the F-gases Draft Law.
- Lack of provision on allocation, authorization and transfer quote for F Gases - Decision 865 fail to provide allocation and transfer quota of F-gases. We recommend that the Albanian legislation is amended to bring it closer to EU regulations and have proposed such revisions in the F-gases Draft Law.
- Incomplete Training and Certification Scheme - the existing Albanian legislation fails to provide or otherwise implement adequate training and certification provisions for F-gases in line with EU legislation. Consequently, we recommend and have suggested a revised training and certification scheme in order to allow Albanian legislation to be in line with EU requirements.
- Decision 865 contains several errors and irregularities in the existing classification codes - because of the errors and irregularities identified during the review process of Decision 865, the new Draft Law on F-gases intends to harmonize with the most up-to-date combined nomenclature of the European Union classification of goods.

The above listed findings make it clear that it is crucial to draft and adopt a new legal framework for the handling reduction of the F- Gases in Albania that is more in line with European Union regulations and accelerate the reduction in the use and trade of F-gases and as well as the products and equipment that rely on F -gases.

The draft Law on F-gases aims to:

- (i) bring Albanian F-gases related legislation on a sound legal basis;
- (ii) bring Albanian F-gases related legislation in line with the Kigali Amendment to the Montreal Protocol;
- (iii) bring Albanian F-gases related legislation closer to the rules applicable to European Union member states, regarding the legal framework, regulations and administrative rules vis-à-vis the control, use, import and export, verification and inspection procedures for the use and placing on the market of F-gases.

In addition, the Draft Law on F-gases aims at being in full alignment with the *Acquis Communautaires* of the European Union. The approximation of its legislation with that of the European Union constitutes an obligation for the Albanian Government, including its cooperation in the field of environmental protection which derives from Article 108 of the Stabilization and Association Agreement (hereinafter “SAA”), signed between the European Union and the Republic of Albania. Thus, the adoption of this Draft Law enables the effective implementation of Article 108 of SAA, which states that the “*Parties shall develop and strengthen their cooperation in the environmental field with the vital task of halting further degradation and start improving the environmental situation with the aim of sustainable development*”.

The EU Regulation on F-gases, No 517/2014, implements an EU-wide phase-down for HFCs, which started in 2015, with the aim of cutting emissions by two thirds by 2030 in the EU compared with 2014. It mandates companies to report their annual production, imports, exports and other activities involving HFCs, as well as other F-gases, and includes all the F-gases covered by the Kyoto Protocol: HFCs,

perfluorocarbons (PFCs), sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃), as well as others such as unsaturated HFCs and HCFCs (hydrochlorofluorocarbons).

In some respects, the Kigali Amendment adopts a similar phase-down approach to the EU's. However, the EU regulation is more ambitious up until 2034, is more prescriptive in terms of mechanisms for achieving its targets (i.e. the Quota System), and covers all HFCs (unlike the Kigali Amendment which does not cover F-gases such as hydrofluoroolefins, HFO).

Analysis of the Draft Law on F-gases - This Draft Law is structured in 7 Chapters and 7 different Annexes according to the different topics which are addressed. More specific the Law Aims to establish rules on containment, use, recovery and destruction of fluorinated greenhouse gases, and on related ancillary measures; imposes conditions on the placing on the market of specific products and equipment that contain, or whose functioning relies upon, fluorinated greenhouse gases; imposes conditions on specific uses of fluorinated greenhouse gases; and establishes quantitative limits for the placing on the market of hydrofluorocarbons.

Chapter I of the Draft Law on F-gases, in contrast to Decision No. 865, addresses a broad range of definitions in pursuant to Regulation (EU) No 517/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006. In relation to the relevant authorities in charge of the implementation of this F-gases Draft Law, are clearly identified. Also a special role is provided for other structures and/or governmental agencies which are embodied by this Draft Law with the relevant powers and responsibilities regarding the management of the entire process relating to controlled substances that deplete the ozone layer, from their registration, the placing on the market, to their control and inspection allocation and licensing.

Chapter II of the Draft Law on F-gases establishes the specific rules of containment on prevention of emissions of fluorinated greenhouse gases including prohibition of the intentional release of fluorinated greenhouse gases into the atmosphere. Moreover, operators must ensure checking for leaks of equipment that contains fluorinated greenhouse gases in quantities of 5 tons of CO₂ equivalents or more and not contained in foams. Furthermore the law require the leakage detection system, record keeping, and emission in relation to production, recovery, certification programs and training.

Chapter III of Draft Law on F-gases, aims to clarify the rules and restriction of placing on the market and controls concerning the use of product and equipment from the date specified in the Annex III of the draft Law. First of all, after the approval of the Law it will be prohibited in Albania that product and equipment specified in Annex 3 shall be placed on the market exception for military equipment where applicable. In order to protect the environment by multiplying safety measures in the use of F gases products and equipment, it is worth mentioning that the prohibition set out in paragraph 1 of the law shall not apply to equipment for which it has been established in eco design requirements adopted under Directive 2009/125/EC. Due to higher energy efficiency during its operation, its life cycle CO₂ equivalent emissions would be lower than those of equivalent equipment which meets relevant eco design requirements and does not contain hydrofluorocarbons.

Furthermore this Chapter clarifies that for the purposes of carrying out the installation, servicing, maintenance or repair of the equipment that contains fluorinated greenhouse gases or whose functioning relies upon those gases, fluorinated greenhouse gases shall only be sold to and purchased by undertakings that hold the relevant certificates or undertakings that employ persons holding a certificate or a training attestation. In addition to the above the Draft Law clarifies the rules not only on

restriction on placing on marked, also on labelling of product and equipment information. The product and equipment shall not be placed in market unless they are labelled. It also clarifies control and use of sulphur hexafluoride in magnesium die-casting and in the recycling of magnesium die-casting alloys which shall be prohibited, with exception to military equipment.

Chapter IV lays down rules on reduction of the quantity of hydrofluorocarbons placed on the market and ensures that the quantity of hydrofluorocarbons that producers and importers are entitled to place on the market each year does not exceed the maximum quantity for the year in question calculated in accordance with Annex V.

It is stipulated that the producers and importers shall ensure that the quantity of hydrofluorocarbons calculated in accordance with Annex V that that each of them places on the market does not exceed their respective quota allocated pursuant to Article 16(5) or transferred pursuant to Article 18 with exception to producers or importers of less than 100 tonnes of CO₂ equivalent of hydrofluorocarbons per year and to the following categories of hydrofluorocarbons:

- (i) hydrofluorocarbons imported into the European Union for destruction;
- (ii) hydrofluorocarbons used by a producer in feedstock applications or supplied directly by a producer or an importer to undertakings for use in feedstock applications;
- (iii) hydrofluorocarbons supplied directly by a producer or an importer to undertakings, for export out of the European Union, where those hydrofluorocarbons are not subsequently made available to any other party within the European Union, prior to export;
- (iv) hydrofluorocarbons supplied directly by a producer or an importer for use in military equipment;
- (v) hydrofluorocarbons supplied directly by a producer or an importer to an undertaking using it for the etching of semiconductor material or the cleaning of chemicals vapor deposition chambers within the semiconductor manufacturing sector.

In addition to the above the Draft Law clarifies that the rules not only on reduction of the quantity of hydrofluorocarbons placed on the market but as well on allocation of quotas placing in market, registry of quotas on the designated electronic registration system. Moreover, the rules are clearly specified on the transfer and authorization for transfer of quotas for placing on the market hydrofluorocarbons in imported equipment.

Chapter V of the Draft Law on F-gases aims to establish rules for reporting on production, import, export, feedstock use and destruction of the substances listed in Annexes I or II. This chapter is clarifies that after certain period of time (max 1 year) after the law is enforced, each producer, importer and exporter that produced, imported or exported one metric tonne or 100 tonnes of CO₂ equivalent or more of fluorinated greenhouse gases and gases listed in Annex II during the preceding calendar year shall report to the Minster responsible for the environment the data specified in Annex VII on each of those substances for that calendar year. This paragraph shall also apply to undertakings receiving quotas pursuant to Article 18(1). In addition to the reporting on production it shall be established the reporting system for the collection of emissions data.

Chapter VI: of the Draft Law on F-gases aims to stipulate that the licensing for the import and / or export of controlled substances is carried out only by licensed undertakings, in accordance with the criteria, conditions, terms and procedures set out in the applicable legislation on licenses, authorizations and permits in the Republic of Albania for Code III.3 licenses.

Finally we recommend that, if approved, will be an important step to help Albania bring its legislation in compliance with the EU standards. The proposed version of the Draft Law on F- Gases is fully in line with EU regulation and transposes the Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006

Considering the above mentioned, through this report, we propose and strongly recommend that the Council of Ministers Decision 865 “*On the Reduction and Stabilisation of Emissions of F-gases*”, should be replaced by Draft Law proposal “*On Fluorinated Greenhouse Gases*” (Appendix 1).

2.3 Safety Standards

Under this project, a study **on safety standards** has been conducted by the national consultant in collaboration with the National Ozone Unit, the Ministry of Infrastructure and Energy, the General Directorate of Standardization, the Ministry of Tourism and Environment and RAC technicians. Under this component, the following activities are carried out:

- Roles and responsibilities of relevant ministries and other stakeholders were updated in the areas of energy efficiency and refrigerant safety in particular;
- Information was collected and analysed in a way useful to formulate the country’s strategy on refrigerant safety and standards with all relevant stakeholder identified and consulted;
- Discussions among stakeholders were promoted toward the development of adaptable refrigerant safety standards in the wake of the ratification of Kigali Amendment;
- Reviewing the operating codes and standards for the correct and efficient use of HFCs and ODS alternatives along the value chain.
- A report on the operating codes and standards was circulated for review by stakeholders and finalized reflecting their feedback.

A workshop was held on November 14, 2018 on safety standards where a proposal for updating codes and standards in line with the Kigali Amendment was presented. The meeting participants were representatives of the NOU, the Ministry of Tourism and Environment, the General Directorate of Standardization, the National Business Centre, RAC associations, legal consultants and RAC consultants. The final report has been drafted, circulated, revised and submitted for the due process.

2.4 Energy Efficiency

Under this project, a study **on energy efficiency** has been conducted by the national consultant in collaboration with the National Ozone Unit, the Ministry of Infrastructure and Energy, the General Directorate of Standardization, the Ministry of Tourism and Environment and RAC technicians. Under this component, the following activities were carried out:

- Roles and responsibilities of relevant ministries and other stakeholders were updated in the areas of energy efficiency and refrigerant safety;
- Information was collected and analyzed in a way useful to formulate the country’s strategy to seize opportunities to achieve energy efficiency and HFC phase down while optimizing the

national strategy to pursue both challenges at the same time;

- The results of the updated information on energy efficiency and HFC phase down has been translated and analyzed into policy strategies;
- Discussions among stakeholders are promoted toward the energy efficiency in the wake of the ratification of Kigali Amendment;
- Results summarized in the form of policy and technical papers were disseminated through the stakeholders;
- Related outputs that reflect stakeholders' views were disseminated through proper governmental communication channels.

IV. Financial report

Activities	Responsibility	Funds disbursed (US \$)
a. Activities to support the early ratification of the Kigali Amendment:	a.1. Coordination with Government representatives	2,500
a. Activities to support the early ratification of the Kigali Amendment:	a.2. Supporting national ratification instruments	2,500
b.1. Institutional arrangements	b.1. Reviewing operating codes and standards for the efficient use of HFCs and ODS alternatives in the entire value chain	20,000
b.2. Licensing systems	b.2. Preparing new legislation with special attention to licensing, quota system and harmonized tariff codes according to HFCs commitments	20,000
b.3. Data reporting on HFC consumption	b.3. Review of the national mechanisms used for ODS reporting to include HFCs consumption	25,000
c. Preparation for national strategies	c.1. Identification of policies and regulations to facilitate the phasedown of HFCs and the introduction of low-GWP alternative technologies	24,978,26
	Total	94,978.26

V. Lessons learned and challenges in implementation

The ratification process of the Kigali Amendment has been smooth and successful in Albania. First of all the Kigali Amendment has been explained very well to the stakeholders – especially the economic benefits that can arise when our country goes for the low GWP alternative refrigerants. To build a successful ratification process, the coordination among government institutions and stakeholders on the policies and action plans required has been very important.

The revision of the existing F-gases legislation made it clear that it is crucial to draft and adopt a new legal framework for the handling reduction of the F- Gases in Albania that is more in line with the

European Union regulations. This will be an important step to help Albania bring its legislation in full compliance with the EU standards. The proposed version of the Draft Law “*On Fluorinated Greenhouse Gases*” is fully in line with EU regulation and transposes the Regulation (EU) No 517/2014. The Draft Law on F-gases aims to:

- ✓ Revise the existing national licensing and quota system to include control measures for HFCs and raise awareness to enforcement officers on the revised licensing system;
- ✓ Assist the national customs authorities in establishing the national custom codes for HFCs to facilitate proper monitoring and recording of HFCs imports/exports;
- ✓ Establish a national registration system, product databases and a legal obligation for equipment owners to submit periodic equipment records to competent authorities.
- ✓ Build the national training and certification schemes for the RAC manufacturing and servicing sectors is the next step to take. In particular, the compatibility of existing or emerging training concepts in participants’ countries with international certification schemes and standards was a subject of much concern.

Safety standards and energy efficiency are crucial measures to effectively implement the Kigali Amendment obligations. We strongly recommend to further discuss these and find the way to improve our national safety standards and energy efficiency.

The national strategy has been approved by the Council of Ministers Decision No. 466, dated 3.07.2019 on “The approval of the strategic document and the national plans for mitigation of the F-gases and the adaption of climate change.

Appendix 1 – Draft Law “*On Fluorinated Greenhouse Gases*”.

DRAFT LAW

(No..... Dated....2020)

“*On Fluorinated Greenhouse Gases*”

CHAPTER I

GENERAL PROVISIONS

Article 1

Subject-matter

The objective of this Regulation is to protect the environment by reducing emissions of fluorinated greenhouse gases. Accordingly, this Regulation:

- (a) establishes rules on containment, use, recovery and destruction of fluorinated greenhouse gases,

- and on related ancillary measures;
- (b) imposes conditions on the placing on the market of specific products and equipment that contain, or whose functioning relies upon, fluorinated greenhouse gases;
 - (c) imposes conditions on specific uses of fluorinated greenhouse gases; and
 - (d) establishes quantitative limits for the placing on the market of hydrofluorocarbons.

Article 2

Definitions

For the purposes of this Regulation the following definitions apply:

- (1) 'fluorinated greenhouse gases' means the hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and other greenhouse gases that contain fluorine, listed in Annex I, or mixtures containing any of those substances;
- (2) 'hydrofluorocarbons' or 'HFCs' means the substances listed in section 1 of Annex I, or mixtures containing any of those substances;
- (3) 'perfluorocarbons' or 'PFCs' means the substances listed in section 2 of Annex I, or mixtures containing any of those substances;
- (4) 'sulphur hexafluoride' or 'SF6' means the substance listed in section 3 of Annex I, or mixtures containing that substance;
- (5) 'mixture' means a fluid composed of two or more substances, at least one of which is a substance listed in Annex I or in Annex II;
- (6) 'global warming potential' or 'GWP' means the climatic warming potential of a greenhouse gas relative to that of carbon dioxide ('CO₂'), calculated in terms of the 100-year warming potential of one kilogram of a greenhouse gas relative to one kilogram of CO₂, as set out in Annexes I, II and IV or in the case of mixtures, calculated in accordance with Annex IV;
- (7) 'tonne(s) of CO₂ equivalent' means a quantity of greenhouse gases,, expressed as the product of the weight of the greenhouse gases in metric tonnes and of their global warming potential;
- (8) 'operator' means the natural or legal person exercising actual power over the technical functioning of products and equipment covered by this Regulation; a Member State may, in defined, specific situations, designate the owner as being responsible for the operator's obligations;
- (9) 'use' means the utilisation of fluorinated greenhouse gases in the production, maintenance or servicing, including the refilling, of products and equipment, or in other processes referred to in this Regulation;
- (10) 'placing on the market' means supplying or making available to another party in the Union for the first time, for payment or free of charge, or using for its own account in the case of a producer, and includes customs release for free circulation in the Union;
- (11) 'hermetically sealed equipment' means equipment in which all fluorinated greenhouse gas containing parts are made tight by welding, brazing or a similar permanent connection, which may include capped valves or capped service ports that allow proper repair or disposal, and which have a tested leakage rate of less than 3 grams per year under a pressure of at least a quarter of the maximum allowable pressure;

- (12) 'container' means a product which is designed primarily for transporting or storing fluorinated greenhouse gases;
- (13) 'a non-refillable container' means a container which cannot be refilled without being adapted for that purpose or is placed on the market without provision having been made for its return for refilling;
- (14) 'recovery' means the collection and storage of fluorinated greenhouse gases from products, including containers, and equipment during maintenance or servicing or prior to the disposal of the products or equipment;
- (15) 'recycling' means the reuse of a recovered fluorinated greenhouse gas following a basic cleaning process;
- (16) 'reclamation' means the reprocessing of a recovered fluorinated greenhouse gas in order to match the equivalent performance of a virgin substance, taking into account its intended use;
- (17) 'destruction' means the process of permanently transforming or decomposing all or most of a fluorinated greenhouse gas into one or more stable substances that are not fluorinated greenhouse gases;
- (18) 'decommissioning' means the final shut-down and removal from operation or usage of a product or piece of equipment containing fluorinated greenhouse gases;
- (19) 'repair' means the restoration of damaged or leaking products or equipment that contain, or whose functioning relies upon, fluorinated greenhouse gases, involving a part containing or designed to contain such gases;
- (20) 'installation' means joining two or more pieces of equipment or circuits containing or designed to contain fluorinated greenhouse gases, with a view to assembling a system in the location where it will be operated, that entails joining together gas carrying conductors of a system to complete a circuit irrespective of the need to charge the system after assembly;
- (21) 'maintenance or servicing' means all activities, excluding recovery in accordance with Article 8 and leak checks in accordance with Article 4 and point (b) of Article 10(1) of this Regulation, that entail breaking into the circuits containing or designed to contain fluorinated greenhouse gases, in particular supplying the system with fluorinated greenhouse gases, removing one or more pieces of circuit or equipment, reassembling two or more pieces of circuit or equipment, as well as repairing leaks;
- (22) 'virgin substance' means a substance which has not previously been used;
- (23) 'stationary' means not normally in transit during operation and includes moveable room air-conditioning appliances;
- (24) 'mobile' means normally in transit during operation;
- (25) 'one-component foam' means a foam composition contained in a single aerosol dispenser in unreacted or partly reacted liquid state and that expands and hardens when it leaves the dispenser;
- (26) 'refrigerated truck' means a motor vehicle with a mass of more than 3,5 tonnes that is designed and constructed primarily to carry goods and that is equipped with a refrigeration unit;
- (27) 'refrigerated trailer' means a vehicle that is designed and constructed to be towed by a truck or a tractor, primarily to carry goods and that is equipped with a refrigeration unit;

- (28) 'technical aerosol' means an aerosol dispenser used in maintaining, repairing, cleaning, testing, disinsecting and manufacturing products and equipment, installing equipment, and in other applications;
- (29) 'leakage detection system' means a calibrated mechanical, electrical or electronic device for detecting leakage of fluorinated greenhouse gases which, on detection, alerts the operator;
- (30) 'undertaking' means any natural or legal person who:
- (a) produces, uses, recovers, collects, recycles, reclaims, or destroys fluorinated greenhouse gases;
 - (b) imports or exports fluorinated greenhouse gases or products and equipment that contain such gases;
 - (c) places on the market fluorinated greenhouse gases or products and equipment that contain, or whose functioning relies upon, such gases;
 - (d) installs, services, maintains, repairs, checks for leaks or decommissions equipment that contains, or whose functioning relies upon, fluorinated greenhouse gases;
 - (e) is the operator of equipment that contains, or whose functioning relies upon, fluorinated greenhouse gases;
 - (f) produces, imports, exports, places on the market or destroys gases listed in Annex II;
 - (g) places on the market products or equipment containing gases listed in Annex II;
- (31) 'feedstock' means any fluorinated greenhouse gas, or substance listed in Annex II, that undergoes chemical transformation in a process in which it is entirely converted from its original composition and its emissions are insignificant;
- (32) 'commercial use' means used for the storage, display or dispensing of products, for sale to end users, in retail and food services;
- (33) 'fire protection equipment' means the equipment and systems utilised in fire prevention or suppression applications and includes fire extinguishers;
- (34) 'organic Rankine cycle' means a cycle containing condensable fluorinated greenhouse gas converting heat from a heat source into power for the generation of electric or mechanical energy;
- (35) 'military equipment' mean arms, munitions and war material intended specifically for military purposes which are necessary for the protection of the essential interests of the security of Member States;
- (36) 'electrical switchgear' means switching devices and their combination with associated control, measuring, protective and regulating equipment, and assemblies of such devices and equipment with associated interconnections, accessories, enclosures and supporting structures, intended for usage in connection with the generation, transmission, distribution and conversion of electric energy;
- (37) 'multipack centralised refrigeration systems' means systems with two or more compressors operated in parallel, which are connected to one or more common condensers and to a number of cooling devices such as display cases, cabinets, freezers or to chilled store rooms;
- (38) 'primary refrigerant circuit of cascade systems' means the primary circuit in indirect medium temperature systems where a combination of two or more separate refrigeration circuits are connected in series such that the primary circuit absorbs the condenser heat from a secondary

circuit for the medium temperature;

(39)'single split air conditioning systems' means systems for room air conditioning that consist of one outdoor unit and one indoor unit linked by refrigerant piping, needing installation at the site of usage.

CHAPTER II CONTAINMENT

Article 3

Prevention of emissions of fluorinated greenhouse gases

1. The intentional release of fluorinated greenhouse gases into the atmosphere shall be prohibited where the release is not technically necessary for the intended use.
2. Operators of equipment that contains fluorinated greenhouse gases shall take precautions to prevent the unintentional release ('leakage') of those gases. They shall take all measures which are technically and economically feasible to minimise leakage of fluorinated greenhouse gases.
3. Where a leakage of fluorinated greenhouse gases is detected, the operators shall ensure that the equipment is repaired without undue delay.
4. Where the equipment is subject to leak checks under Article 4(1), and a leak in the equipment has been repaired, the operators shall ensure that the equipment is checked by a certified natural person within one month after the repair to verify that the repair has been effective.
5. Natural persons carrying out the tasks referred to in points (a) to (c) of Article 10(1) shall be certified in accordance with Article 10(4) and (7) and shall take precautionary measures to prevent leakage of fluorinated greenhouse gases.
6. Undertakings carrying out the installation, servicing, maintenance, repair or decommissioning of the equipment listed in points (a) to (d) of the Article 4(2) shall be certified in accordance with Article 10(6) and (7) and shall take precautionary measures to prevent leakage of fluorinated greenhouse gases.

Article 4

Leak checks

1. Operators of equipment that contains fluorinated greenhouse gases in quantities of 5 tonnes of CO₂ equivalent or more and not contained in foams shall ensure that the equipment is checked for leaks.
2. Hermetically sealed equipment that contains fluorinated greenhouse gases in quantities of less than 10 tonnes of CO₂ equivalent, shall not be subject to leak checks under this Article, provided the equipment is labelled as hermetically sealed.
3. Electrical switchgear shall not be subject to leak checks under this Article provided it complies with one of the following conditions:
 - a. it has a tested leakage rate of less than 0,1 % per year as set out in the technical specification of the manufacturer and is labelled accordingly;

- b. it is equipped with a pressure or density monitoring device; or
- c. it contains less than 6 kg of fluorinated greenhouse gases.

4. Paragraph 1 applies to operators of the following equipment that contains fluorinated greenhouse gases:

- a. stationary refrigeration equipment;
- b. stationary air-conditioning equipment;
- c. stationary heat pumps;
- d. stationary fire protection equipment;
- e. refrigeration units of refrigerated trucks and trailers;
- f. electrical switchgear;
- g. organic Rankine cycles.

As regards the equipment referred to in points (a) to (e) of the first subparagraph, the checks shall be carried out by natural persons certified in accordance with the rules provided for in Article 10.

5. The leak checks pursuant to paragraph 1 shall be carried out with the following frequency:

- a. for equipment that contains fluorinated greenhouse gases in quantities of 5 tonnes of CO₂ equivalent or more, but of less than 50 tonnes of CO₂ equivalent: at least every 12 months; or where a leakage detection system is installed, at least every 24 months;
- b. for equipment that contains fluorinated greenhouse gases in quantities of 50 tonnes of CO₂ equivalent or more, but of less than 500 tonnes of CO₂ equivalent: at least every six months or, where a leakage detection system is installed, at least every 12 months;
- c. for equipment that contains fluorinated greenhouse gases in quantities of 500 tonnes of CO₂ equivalent or more: at least every three months or, where a leakage detection system is installed, at least every six months.

6. Obligations of paragraph 1 for fire protection equipment as referred to in point (d) of paragraph 2 shall be considered to be fulfilled provided the following two conditions are met:

- a. the existing inspection regime meets ISO 14520 or EN 15004 standards; and
- b. the fire protection equipment is inspected as often as is required under paragraph 3.

Article 5

Leakage detection systems

1. Operators of the equipment listed in points (a) to (d) of Article 4(2) and containing fluorinated greenhouse gases in quantities of 500 tonnes of CO₂ equivalent or more, shall ensure that the equipment is provided with a leakage detection system which alerts the operator or a service company of any leakage.

2. Operators of the equipment listed in points (f) and (g) of Article 4(2) and containing fluorinated greenhouse gases in quantities of 500 tonnes of CO₂ equivalent or more and installed from 1 January 2017, shall ensure that this equipment is provided with a leakage detection system which alerts the operator or a service company of any leakage.

3. Operators of the equipment listed in points (a) to (d) and (g) of Article 4(2) that is subject to paragraph 1 or 2 of this Article shall ensure that leakage detection systems are checked at least once every 12 months to ensure their proper functioning.

4. Operators of the equipment listed in point (f) of Article 4(2) that is subject to paragraph 2 of this Article shall ensure that leakage detection systems are checked at least once every 6 years to ensure their proper functioning.

Article 6

Record keeping

1. Operators of equipment which is required to be checked for leaks pursuant to Article 4(1), shall establish and maintain records for each piece of such equipment specifying the following information:
 - a. the quantity and type of fluorinated greenhouse gases installed;
 - b. the quantities of fluorinated greenhouse gases added during installation, maintenance or servicing or due to leakage;
 - c. whether the quantities of installed fluorinated greenhouse gases have been recycled or reclaimed, including the name and address of the recycling or reclamation facility and, where applicable, the certificate number;
 - d. the quantity of fluorinated greenhouse gases recovered;
 - e. the identity of the undertaking which installed, serviced, maintained and where applicable repaired or decommissioned the equipment, including, where applicable, the number of its certificate;
 - f. the dates and results of the checks carried out under Article 4(1) to (3);
 - g. if the equipment was decommissioned, the measures taken to recover and dispose of the fluorinated greenhouse gases.
2. Unless the records referred to in paragraph 1 are stored in a database set up by the competent authorities of the Member States the following rules apply:
 - a. the operators referred to in paragraph 1 shall keep the records referred to in that paragraph for at least five years;
 - b. Undertakings carrying out the activities referred to in point (e) of paragraph 1 for operators shall keep copies of the records referred to in paragraph 1 for at least five years.
3. The records referred to in paragraph 1 shall be made available, on request, to the competent authorities.
4. For the purpose of Article 11(4), undertakings supplying fluorinated greenhouse gases shall establish records of relevant information on the purchasers of fluorinated greenhouse gases including the following details:
 - a. numbers of certificates of the purchasers; and
 - b. the respective quantities of fluorinated greenhouse gases purchased.
5. The format of the data recording shall be approved by order of the Minister responsible for the environment.

Article 7

Emissions of fluorinated greenhouse gases in relation to production

1. Producers of fluorinated compounds shall take all necessary precautions to limit emissions of fluorinated greenhouse gases to the greatest extent possible during:
 - a. production;
 - b. transport; and
 - c. storage.
 - d. fluorinated greenhouse gases are produced as by-products.
2. Without prejudice to Article 11(1), the placing on the market of fluorinated greenhouse gases and gases listed in Annex II shall be prohibited unless, where relevant, producers or importers provide evidence, at the time of such placing, that trifluoromethane, produced as a by-product during the manufacturing process, including during the manufacturing of feedstocks for their production, has been destroyed or recovered for subsequent use, in line with best available techniques.

This requirement shall apply from

Article 8

Recovery

1. Operators of stationary equipment or of refrigeration units of refrigerated trucks and trailers that contain fluorinated greenhouse gases not contained in foams shall ensure that the recovery of those gases is carried out by natural persons that hold the relevant certificates provided for by Article 10, so that those gases are recycled, reclaimed or destroyed.
2. This obligation applies to operators of any of the following equipment:
 - a. the cooling circuits of stationary refrigeration, stationary air-conditioning and stationary heat pump equipment;
 - b. the cooling circuits of refrigeration units of refrigerated trucks and trailers;
 - c. stationary equipment that contains fluorinated greenhouse gas-based solvents;
 - d. stationary fire protection equipment;
 - e. stationary electrical switchgear.
3. The undertaking that uses a fluorinated greenhouse gas container immediately prior to its disposal shall arrange for the recovery of any residual gases to make sure they are recycled, reclaimed or destroyed.
4. Operators of products and equipment not listed in paragraph 1, including mobile equipment, that contain fluorinated greenhouse gases shall arrange for the recovery of the gases, to the extent that it is technically feasible and does not entail disproportionate costs, by appropriately qualified natural persons, so that they are recycled, reclaimed or destroyed or shall arrange for their destruction without prior recovery.
5. The recovery of fluorinated greenhouse gases from air-conditioning equipment in road vehicles outside the scope of Directive 2006/40/EC of the European Parliament and of the Council ⁽²⁰⁾ shall be carried out by appropriately qualified natural persons.
6. For the recovery of fluorinated greenhouse gases from air-conditioning equipment in motor vehicles falling within the scope of Directive 2006/40/EC only natural persons holding at least a training attestation in accordance with Article 10(2) shall be considered appropriately qualified.

Article 9

Training and Certification

1. The certification programmes and training provided for in paragraphs 1 and 2 shall cover the following:

- a. applicable regulations and technical standards;
 - b. emission prevention;
 - c. recovery of fluorinated greenhouse gases;
 - d. safe handling of equipment of the type and size covered by the certificate;
 - e. information on relevant technologies to replace or to reduce the use of fluorinated greenhouse gases and their safe handling.
2. Certificates under the certification programs shall be subject to the condition that the applicant has successfully completed an evaluation process. The training process is not mandatory.
 3. The minimum requirement, the documentation needed to be submitted, and the procedure of the certification shall be approved by the Decision of Council of Ministers
 4. The Ministry of the Environment establishes and publishes the register with the records, for the certificates released to the individuals.
 5. The model of the register shall be approved by the order of the Minister responsible for the environment.

CHAPTER III

PLACING ON THE MARKET AND CONTROL OF USE

Article 11

Restrictions on the placing on the market

1. The placing on the market of products and equipment listed in Annex III, with an exemption for military equipment, shall be prohibited from the date specified in that Annex, differentiating, where applicable, according to the type or global warming potential of the fluorinated greenhouse gas contained.
2. The prohibition set out in paragraph 1 shall not apply to equipment for which it has been established in ecodesign requirements adopted under Directive 2009/125/EC that due to higher energy efficiency during its operation, its lifecycle CO₂ equivalent emissions would be lower than those of equivalent equipment which meets relevant ecodesign requirements and does not contain hydrofluorocarbons.
3. For the purposes of carrying out the installation, servicing, maintenance or repair of the equipment that contains fluorinated greenhouse gases or whose functioning relies upon those gases, fluorinated greenhouse gases shall only be sold to and purchased by undertakings that hold the relevant certificates or undertakings that employ persons holding a certificate or a training attestation. This paragraph shall not prevent non-certified undertakings, who do not carry out the activities referred to in the first sentence of this paragraph, from collecting, transporting or delivering fluorinated greenhouse gases.
4. Non-hermetically sealed equipment charged with fluorinated greenhouse gases shall only be sold to the end user where evidence is provided that the installation is to be carried out by an undertaking certified.

Article 12

Labelling and product and equipment information

1. Products and equipment that contain, or whose functioning relies upon, fluorinated greenhouse gases shall not be placed on the market unless they are labelled. This only applies to:
 - a. refrigeration equipment;
 - b. air-conditioning equipment;
 - c. heat pumps;
 - d. fire protection equipment;

- e. electrical switchgear;
 - f. aerosol dispenser that contain fluorinated greenhouse gases, with the exception of metered dose inhalers for the delivery of pharmaceutical ingredients;
 - g. all fluorinated greenhouse gas containers;
 - h. fluorinated greenhouse gas-based solvents;
 - i. organic Rankine cycles.
2. The label required pursuant to paragraph 1 shall indicate the following information:
 - a. a reference that the product or equipment contains fluorinated greenhouse gases or that its functioning relies upon such gases;
 - b. the accepted industry designation for the fluorinated greenhouse gases concerned or, if no such designation is available, the chemical name;
 - c. from 1 January 2017, the quantity expressed in weight and in CO₂ equivalent of fluorinated greenhouse gases contained in the product or equipment, or the quantity of fluorinated greenhouse gases for which the equipment is designed, and the global warming potential of those gases.
 3. The label required pursuant to paragraph 1 shall indicate the following information, where applicable:
 - a. a reference that the fluorinated greenhouse gases are contained in hermetically sealed equipment;
 - b. a reference that the electrical switchgear has a tested leakage rate of less than 0,1 % per year as set out in the technical specification of the manufacturer.
 4. The label shall be clearly readable and indelible and shall be placed either:
 - a. adjacent to the service ports for charging or recovering the fluorinated greenhouse gas; or
 - b. on that part of the product or equipment that contains the fluorinated greenhouse gas.
 5. Foams and pre-blended polyols that contain fluorinated greenhouse gases shall not be placed on the market unless the fluorinated greenhouse gases are identified with a label using the accepted industry designation or, if no such designation is available, the chemical name. The label shall clearly indicate that the foam or pre-blended polyol contains fluorinated greenhouse gases. In the case of foam boards, this information shall be clearly and indelibly stated on the boards.
 6. Reclaimed or recycled fluorinated greenhouse gases shall be labelled with an indication that the substance has been reclaimed or recycled, information on the batch number and the name and address of the reclamation or recycling facility.
 7. Fluorinated greenhouse gases placed on the market for destruction shall be labelled with an indication that the contents of the container may only be destroyed.
 8. Fluorinated greenhouse gases placed on the market for direct export shall be labelled with an indication that the contents of the container may only be directly exported.
 9. Fluorinated greenhouse gases placed on the market for the use in military equipment shall be labelled with an indication that the contents of the container may only be used for that purpose.
 10. Fluorinated greenhouse gases placed on the market for the etching of semiconductor material or the cleaning of chemicals vapour deposition chambers within the semiconductor manufacturing sector shall be labelled with an indication that the contents of the container may only be used for that purpose.
 11. Fluorinated greenhouse gases placed on the market for feedstock use shall be labelled with an indication that the contents of the container may only be used as feedstock.
 12. Fluorinated greenhouse gases placed on the market for producing metered dose inhalers for the delivery of pharmaceutical ingredients shall be labelled with an indication that the contents of the container may only be used for that purpose.

13. The information referred to in paragraphs 2,3 and 5 shall be included in instruction manuals for the products and equipment concerned.
14. In the case of products and equipment that contain fluorinated greenhouse gases with a global warming potential of 150 or more this information shall also be included in descriptions used for advertising.
15. The Ministry of Environment shall be empowered to adopt delegated acts in accordance with Article 22 amending the labelling requirements set out in paragraphs 4 to 12 where appropriate in view of commercial or technological development.

Article 13

Control of use

1. The use of sulphur hexafluoride in magnesium die-casting and in the recycling of magnesium die-casting alloys shall be prohibited.
 - a. As regards installations using a quantity of sulphur hexafluoride below 850 kg per year, in respect of magnesium die-casting and in the recycling of magnesium die-casting alloys, this prohibition shall only apply from
 - b. The use of sulphur hexafluoride to fill vehicle tires shall be prohibited
 - c. the use of fluorinated greenhouse gases, with a global warming potential of 2 500 or more, to service or maintain refrigeration equipment with a charge size of 40 tonnes of CO₂ equivalent or more, shall be prohibited.
2. This paragraph shall not apply to military equipment or equipment intended for applications designed to cool products to temperatures below – 50 °C.
3. The prohibition referred to in the first subparagraph shall not apply to the following categories of fluorinated greenhouse gases until:
 - (a) reclaimed fluorinated greenhouse gases with a global warming potential of 2 500 or more used for the maintenance or servicing of existing refrigeration equipment, provided that they have been labelled in accordance with Article 12(6);
 - (b) recycled fluorinated greenhouse gases with a global warming potential of 2 500 or more used for the maintenance or servicing of existing refrigeration equipment provided they have been recovered from such equipment. Such recycled gases may only be used by the undertaking which carried out their recovery as part of maintenance or servicing or the undertaking for which the recovery was carried out as part of maintenance or servicing.

CHAPTER IV

REDUCTION OF THE QUANTITY OF HYDROFLUOROCARBONS PLACED ON THE MARKET

Article 15

Reduction of the quantity of hydrofluorocarbons placed on the market

1. The Commission shall ensure that the quantity of hydrofluorocarbons that producers and importers are entitled to place on the market in the Union each year does not exceed the maximum quantity for the year in question calculated in accordance with Annex V.

2. Producers and importers shall ensure that the quantity of hydrofluorocarbons calculated in accordance with Annex V that that each of them places on the market does not exceed their respective quota allocated pursuant to Article 16(5) or transferred pursuant to Article 18.
3. This Article shall not apply to producers or importers of less than 100 tonnes of CO₂ equivalent of hydrofluorocarbons per year.
4. This Article shall also not apply to the following categories of hydrofluorocarbons:
 - a. hydrofluorocarbons imported into the Union for destruction;
 - b. hydrofluorocarbons used by a producer in feedstock applications or supplied directly by a producer or an importer to undertakings for use in feedstock applications;
 - c. hydrofluorocarbons supplied directly by a producer or an importer to undertakings, for export out of the Union, where those hydrofluorocarbons are not subsequently made available to any other party within the Union, prior to export;
 - d. hydrofluorocarbons supplied directly by a producer or an importer for use in military equipment;
 - e. hydrofluorocarbons supplied directly by a producer or an importer to an undertaking using it for the etching of semiconductor material or the cleaning of chemicals vapour deposition chambers within the semiconductor manufacturing sector;
4. Following a substantiated request by a competent authority of a Member State and taking into account the objectives of this Regulation, the Commission may, exceptionally, by means of implementing acts, authorise an exemption for up to four years to exclude from the quota requirement laid down in paragraph 1 hydrofluorocarbons for use in specific applications, or specific categories of products or equipment, where it is demonstrated that:
 - a. for those particular applications, products or equipment, alternatives are not available, or cannot be used for technical or safety reasons; and
 - b. a sufficient supply of hydrofluorocarbons cannot be ensured without entailing disproportionate costs.

Article 16

Allocation of quotas for placing hydrofluorocarbons on the market

1. By the Ministry responsible for the environment shall, by means of implementing acts, determine for each producer or importer, having reported data regarding the value based on the annual average of the quantities of hydrofluorocarbons the producer or importer reported to have placed on the market. The reference values shall be calculated in accordance with Annex V to this Regulation.
2. Producers and importers that have not reported placing on the market hydrofluorocarbons ,may declare their intention to place hydrofluorocarbons on the market in the following year.
3. By , the Ministry responsible for the environment shall recalculate the reference values for the producers and importers on the basis of the annual average of the quantities of hydrofluorocarbons lawfully placed on the market. The Ministry shall determine those reference values by means of implementing acts.
4. The Ministry responsible for the environment shall allocate quotas for placing hydrofluorocarbons on the market for each producer and importer of the Republic of Albania.

Article 17

Registry

1. With the , the Commission shall set up and ensure the operation of an electronic registry for quotas for placing hydrofluorocarbons on the market ('the registry').
2. Registration in the registry shall be compulsory for the following:
 - a. producers and importers to which a quota for the placing on the market of hydrofluorocarbons;
 - b. undertakings to which a quota is transferred in accordance with Article 18;
 - c. producers and importers declaring their intention to submit a declaration pursuant to Article 16(2);
 - d. producers and importers supplying, or undertakings in receipt of hydrofluorocarbons for the purposes listed in points 3 and 4 of the second subparagraph of Article 15;
 - e. importers of equipment placing pre-charged equipment on the market where the hydrofluorocarbons contained in the equipment have not been placed on the market prior to the charging of that equipment in accordance with Article 14.
3. The Commission shall ensure that registered producers and importers are informed via the registry about the quota allocated and about any changes to it during the allocation period.
4. The competent authorities, including customs authorities, shall have access, for information purposes, to the registry.
5. The model of the register shall be approved by the order of the Minister responsible for the environment.

Article 18

Transfer of quotas and authorisation to use quotas for the placing on the market of hydrofluorocarbons in imported equipment

1. Any producer or importer for whom a reference value has been determined pursuant to Article 16(1) or (3) and who has been allocated a quota in accordance with Article 16(5), may transfer in the registry referred to in Article 17(1) that quota for all or any quantities to another producer or importer in the Union or to another producer or importer which is represented in the Union by an only representative referred to in the second and third subparagraph of Article 16(5).
2. Any producer or importer having received its quota pursuant to Article 16(1) and (3) or to whom a quota has been transferred pursuant to paragraph 1 of this Article may authorize another undertaking to use its quota for the purpose of Article 14.
3. Any producer or importer having received its quota exclusively on the basis of a declaration pursuant to Article 16(2), may only authorize another undertaking to use its quota for the purpose of Article 14 provided that the corresponding quantities of hydrofluorocarbons are physically supplied by the authorizing producer or importer.
4. For the purpose of Articles 15, 16 and 19(1) and (6) the respective quantities of hydrofluorocarbons shall be deemed to be placed on the market by the authorizing producer or importer at the moment of the authorization. The Commission may require from the authorizing producer or importer evidence that it is active in the supply of hydrofluorocarbons.

CHAPTER V REPORTING

Article 19

Reporting on production, import, export, feedstock use and destruction of the substances listed in Annexes I or II

1.year after the law is enforced, each producer, importer and exporter that produced, imported or exported one metric tonne or 100 tonnes of CO₂ equivalent or more of fluorinated greenhouse gases and gases listed in Annex II during the preceding calendar year shall report to the Ministry responsible for the environment the data specified in Annex VII on each of those substances for that calendar year. This paragraph shall also apply to undertakings receiving quotas pursuant to Article 18(1).
2. By and every year thereafter, each undertaking that destroyed 1 metric tonne or 1 000 tonnes of CO₂ equivalent or more of fluorinated greenhouse gases and gases listed in Annex II during the preceding calendar year shall report to the Ministry responsible for the environment the data specified in Annex VII on each of those substances for that calendar year.
3. By and every year thereafter, each undertaking that used 1 000 tonnes of CO₂ equivalent or more of fluorinated greenhouse gases as feedstock during the preceding calendar year shall report to the Ministry responsible for the environment the data specified in Annex VII on each of those substances for that calendar year.
4. By and every year thereafter, each undertaking that placed 500 tonnes of CO₂ equivalent or more of fluorinated greenhouse gases and gases listed in Annex II contained in products or equipment on the market during the preceding calendar year shall report to the Ministry responsible for the environment the data specified in Annex VII on each of those substances for that calendar year.
5. Each importer of equipment that place on the market pre-charged equipment where hydrofluorocarbons contained in this equipment have not been placed on the market prior to the charging of the equipment shall submit to the Ministry responsible for the environment a verification document issued pursuant to Article 14(2).
6. The undertaking shall keep the verification report for at least five years. The verification report shall be made available, on request, to the competent authority concerned and to the Ministry responsible for the environment .
7. The Ministry responsible for the environment, by means of implementing acts, determine the format and means of submitting the reports referred to in this Article.
8. The Ministry responsible for the environment shall take appropriate measures to protect the confidentiality of the information submitted to it in accordance with this Article.

Article 20

Collection of emissions data

Member States shall establish reporting systems for the relevant sectors referred to in this Regulation, with the objective of acquiring, to the extent possible, emissions data.

Article 21

Licensing

1. The import and / or export of controlled substances is carried out only by licensed undertakings, in accordance with the criteria, conditions, terms and procedures set out in the applicable legislation on licenses, authorizations and permits in the Republic of Albania for Code III.3 licenses.

2. The Minister responsible for environment will issue an order listing all the required documentation requested to be submitted by the undertakings in order for them to meet and fulfil the criteria and provisions as envisaged on the legislation on licenses, including the obligation to report according to the requirements of Chapter XI of this act.
3. In case of non-implementation of legal and sub-legal obligations in this matter, the Minister responsible for environment suspends and / or revokes the license in accordance with the legislation on licenses.

CHAPTER VI

FINAL PROVISIONS

Article 22

Administrative measures

1. Failure to comply with the requirements of this law, when it does not constitute a criminal offense, constitutes an administrative violation and is sanctioned under Article 69, point 1 / b, of law no. 10431, dated 9.6.2011, "On environmental protection", as amended, for violations, as follows:

a. From operators related to:

- i. intentioned release of fluorinated greenhouse gases into the atmosphere during the installation, service, maintenance, repair or dismantling of equipment;
- ii. Intentioned release of fluorinated greenhouse gases into the atmosphere during the recovery, recycling and regeneration of fluorinated greenhouse gases;
- iii. failure to perform control for leakage of equipment referred to in Article 4 of this Law, by certified personnel;
- iv. failure to control the leakage of equipment referred to in Article 4 of this Law, containing fluorinated greenhouse gases in the amount of 5 tons of equivalent CO₂ or more;
- v. failure to perform control for leakage of equipment referred to in Article 4 of this Law, with the frequency specified in Article 4 of this Law;
- vi. non-compliance with the control conditions set out in Article 4 of this Law, for stationary fire protection equipment;
- vii. non-supply of equipment referred to in Article 4 of this Law, with the leak detection system, in accordance with the requirements set out in Article 4 of this Law;
- viii. failure to keep the data specified in Article 6 of this Law, for any part of the equipment and not maintaining them for at least 5 (five) years;
- ix. failure to provide to the ministry responsible for the environment, at its request, the data specified in Article 6 of this law;
- x. non-recovery of fluorinated greenhouse gases from stationary equipment or refrigeration units of refrigerated trucks and trailers, listed in Article 8 of this Law, through natural persons who possess the relevant certificate;
- xi. Failure to restore fluoridated greenhouse gases, from products and equipment not listed in Article 8 of this law, based on the best available techniques, to the appropriate qualified natural persons.

b. From entrepreneurs:

- i. performing the installation, servicing, maintenance, repair or dismantling of equipment containing fluorinated greenhouse gases, with uncertified persons;
- ii. for not recording and keeping the data specified in article 6 of this law, for each part of the equipment and not saving them for at least 5 (five) years;
- iii. for failing to provide to the ministry responsible for the environment, at its request, the data specified in Article 6 of this law;
- iv. for failure to take all necessary measures to limit the emissions of fluorinated greenhouse gases during production, transport and storage, as well as in cases where fluorinated greenhouse gases are produced as by-products;
- v. for the placing on the market of fluorinated greenhouse gases and gases listed in Annex II, of this decision, contrary to the requirements set out in Article 7 of this Law;
- vi. For failing to take measures to recover the remaining gases when using a container containing fluorinated greenhouse gases, before its disposal;
- vii. for failing to take measures to finance all costs arising from the establishment and operation of the scheme of recovery, recycling, regeneration or destruction of fluorinated greenhouse gases, within 5 (five) years from the entry into force of this decision;
- viii. for failing of implementation of the scheme of recovery, recycling, regeneration or destruction of fluorinated greenhouse gases by individuals who possess the relevant certificate;
- ix. for the sailing and purchase of fluorinated greenhouse gases for the purpose of carrying out the installation, service, maintenance or repair of equipment containing fluoridated greenhouse gases or the operation of which is based on those gases by individuals not certified;
- x. for the sale of non-hermetically sealed equipment, filled with fluorinated greenhouse gases, for the end users, when it does not prove that the installation of the device will be carried out by a certified individual;
- xi. for the use of sulfur hexafluoride in the process of casting magnesium and in the recycling of cast magnesium alloys and for filling car tires;
- xii. for placing on the market the products and equipment referred to in Article 12, not marked with a label;
- xiii. for non-reporting on production, import, export, use of raw material / feedstock and destruction of substances listed in Annexes I and II, in accordance with the requirements set out in Article 19 of this law.

Article 23

Revocations

All legal provisions that are in conflict with this law are revoked.

Article 24

Bylaws

1. The Minister proposes bylaws, which are approved by the Council of Ministers pursuant to this law.

2. The Council of Ministers and / or the Minister approve bylaws, according to the definition and implementation of this law, within a period of 6 months from its entry into force.

ANNEX I

FLUORINATED GREENHOUSE GASES REFERRED TO IN POINT 1 OF ARTICLE 2

Substance			GWP ⁽¹⁾
Industrial designation	Chemical name (Common name)	Chemical formula	
Section 1: Hydrofluorocarbons (HFCs)			
HFC-23	trifluoromethane (fluoroform)	CHF ₃	14 800
HFC-32	difluoromethane	CH ₂ F ₂	675
HFC-41	fluoromethane (methyl fluoride)	CH ₃ F	92
HFC-125	pentafluoroethane	CHF ₂ CF ₃	3 500
HFC-134	1,1,2,2-tetrafluoroethane	CHF ₂ CHF ₂	1 100
HFC-134a	1,1,1,2-tetrafluoroethane	CH ₂ FCF ₃	1 430
HFC-143	1,1,2-trifluoroethane	CH ₂ FCHF ₂	353
HFC-143a	1,1,1-trifluoroethane	CH ₃ CF ₃	4 470
HFC-152	1,2-difluoroethane	CH ₂ FCH ₂ F	53

HFC-152a	1,1-difluoroethane	CH ₃ CHF ₂	124
HFC-161	fluoroethane (ethyl fluoride)	CH ₃ CH ₂ F	12
HFC-227ea	1,1,1,2,3,3,3-heptafluoropropane	CF ₃ CHF ₂ CF ₃	3 220
HFC-236cb	1,1,1,2,2,3-hexafluoropropane	CH ₂ FCF ₂ CF ₃	1 340
HFC-236ea	1,1,1,2,3,3-hexafluoropropane	CHF ₂ CHF ₂ CF ₃	1 370
HFC-236fa	1,1,1,3,3,3-hexafluoropropane	CF ₃ CH ₂ CF ₃	9 810
HFC-245ca	1,1,2,2,3-pentafluoropropane	CH ₂ FCF ₂ CHF ₂	693
HFC-245fa	1,1,1,3,3-pentafluoropropane	CHF ₂ CH ₂ CF ₃	1 030
HFC-365 mfc	1,1,1,3,3-pentafluorobutane	CF ₃ CH ₂ CF ₂ CH ₃	794
HFC-43-10 mee	1,1,1,2,2,3,4,5,5,5-decafluoropentane	CF ₃ CHFCH ₂ CF ₂ CF ₃	1 640
Section 2: Perfluorocarbons (PFCs)			
PFC-14	tetrafluoromethane (perfluoromethane, carbon tetrafluoride)	CF ₄	7 390
PFC-116	hexafluoroethane (perfluoroethane)	C ₂ F ₆	12 200
PFC-218	octafluoropropane (perfluoropropane)	C ₃ F ₈	8 830
PFC-3-1-10 (R-31-10)	decafluorobutane (perfluorobutane)	C ₄ F ₁₀	8 860
PFC-4-1-12 (R-41-12)	dodecafluoropentane (perfluoropentane)	C ₅ F ₁₂	9 160
PFC-5-1-14	tetradecafluorohexane	C ₆ F ₁₄	9 300

(R-51-14)	(perfluorohexane)		
PFC-c-318	octafluorocyclobutane (perfluorocyclobutane)	c-C ₄ F ₈	10 300
Section 3: Other perfluorinated compounds			
	sulphur hexafluoride	SF ₆	22 800

⁽¹⁾ Based on the Fourth Assessment Report adopted by the Intergovernmental Panel on Climate Change, unless otherwise indicated.

ANNEX II

OTHER FLUORINATED GREENHOUSE GASES SUBJECT TO REPORTING IN ACCORDANCE WITH ARTICLE 19

Substance		GWP ⁽¹⁾
Common name/industrial designation	Chemical formula	
Section 1: Unsaturated hydro(chloro)fluorocarbons		
HFC-1234yf	CF ₃ CF = CH ₂	4 ^{Fn} ⁽²⁾
HFC-1234ze	trans — CHF = CHCF ₃	7 ^{Fn2}
HFC-1336mzz	CF ₃ CH = CHCF ₃	9
HCFC-1233zd	C ₃ H ₂ C ₁ F ₃	4,5
HCFC-1233xf	C ₃ H ₂ C ₁ F ₃	1 ^{Fn} ⁽³⁾

Section 2: Fluorinated ethers and alcohols

HFE-125	CHF_2OCF_3	14 900
HFE-134 (HG-00)	$\text{CHF}_2\text{OCHF}_2$	6 320
HFE-143a	CH_3OCF_3	756
HCFE-235da2 (isofluorane)	$\text{CHF}_2\text{OCHCF}_3$	350
HFE-245cb2	$\text{CH}_3\text{OCF}_2\text{CF}_3$	708
HFE-245fa2	$\text{CHF}_2\text{OCH}_2\text{CF}_3$	659
HFE-254cb2	$\text{CH}_3\text{OCF}_2\text{CHF}_2$	359
HFE-347 mcc3 (HFE-7000)	$\text{CH}_3\text{OCF}_2\text{CF}_2\text{CF}_3$	575
HFE-347pcf2	$\text{CHF}_2\text{CF}_2\text{OCH}_2\text{CF}_3$	580
HFE-356pcc3	$\text{CH}_3\text{OCF}_2\text{CF}_2\text{CHF}_2$	110
HFE-449sl (HFE-7100)	$\text{C}_4\text{F}_9\text{OCH}_3$	297
HFE-569sf2 (HFE-7200)	$\text{C}_4\text{F}_9\text{OC}_2\text{H}_5$	59
HFE-43-10pccc124 (H-Galden 1040x) HG-11	$\text{CHF}_2\text{OCF}_2\text{OC}_2\text{F}_4\text{OCHF}_2$	1 870
HFE-236ca12 (HG-10)	$\text{CHF}_2\text{OCF}_2\text{OCHF}_2$	2 800
HFE-338pcc13 (HG-01)	$\text{CHF}_2\text{OCF}_2\text{CF}_2\text{OCHF}_2$	1 500
HFE-347mmy1	$(\text{CF}_3)_2\text{CFOCH}_3$	343
2,2,3,3,3-pentafluoropropanol	$\text{CF}_3\text{CF}_2\text{CH}_2\text{OH}$	42
bis(trifluoromethyl)-methanol	$(\text{CF}_3)_2\text{CHOH}$	195
HFE-227ea	$\text{CF}_3\text{CHFOCF}_3$	1 540

HFE-236ea2 (desfluoran)	$\text{CHF}_2\text{OCHF}_3$	989
HFE-236fa	$\text{CF}_3\text{CH}_2\text{OCF}_3$	487
HFE-245fa1	$\text{CHF}_2\text{CH}_2\text{OCF}_3$	286
HFE 263fb2	$\text{CF}_3\text{CH}_2\text{OCH}_3$	11
HFE-329 mcc2	$\text{CHF}_2\text{CF}_2\text{OCF}_2\text{CF}_3$	919
HFE-338 mcf2	$\text{CF}_3\text{CH}_2\text{OCF}_2\text{CF}_3$	552
HFE-338mmz1	$(\text{CF}_3)_2\text{CHOCHF}_2$	380
HFE-347 mcf2	$\text{CHF}_2\text{CH}_2\text{OCF}_2\text{CF}_3$	374
HFE-356 mec3	$\text{CH}_3\text{OCF}_2\text{CHF}_3$	101
HFE-356mm1	$(\text{CF}_3)_2\text{CHOCH}_3$	27
HFE-356pcf2	$\text{CHF}_2\text{CH}_2\text{OCF}_2\text{CHF}_2$	265
HFE-356pcf3	$\text{CHF}_2\text{OCH}_2\text{CF}_2\text{CHF}_2$	502
HFE 365 mcf3	$\text{CF}_3\text{CF}_2\text{CH}_2\text{OCH}_3$	11
HFE-374pc2	$\text{CHF}_2\text{CF}_2\text{OCH}_2\text{CH}_3$	557
	$-(\text{CF}_2)_4\text{CH}(\text{OH})-$	73
Section 3: Other perfluorinated compounds		
perfluoropolymethylisopropyl-ether (PFPMIE)	$\text{CF}_3\text{OCF}(\text{CF}_3)\text{CF}_2\text{OCF}_2\text{OCF}_3$	10 300
nitrogen trifluoride	NF_3	17 200
trifluoromethyl sulphur pentafluoride	SF_5CF_3	17 700
perfluorocyclopropane	$\text{C-C}_3\text{F}_6$	17 340 ^{Fn} (4)

⁽¹⁾ Based on the Fourth Assessment Report adopted by the Intergovernmental Panel on Climate Change, unless otherwise indicated.

⁽²⁾ GWP according to the Report of the 2010 Assessment of the Scientific Assessment Panel (SAP) of the Montreal Protocol, Tables 1-11, citing two peer-reviewed scientific references. http://ozone.unep.org/Assessment_Panels/SAP/Scientific_Assessment_2010/index.shtml

⁽³⁾ Default value, global warming potential not yet available.

⁽⁴⁾ Minimum value according to the Fourth Assessment Report adopted by the Intergovernmental Panel on Climate Change.

ANNEX III

PLACING ON THE MARKET PROHIBITIONS REFERRED TO IN ARTICLE 11(1)

Products and equipment Where relevant, the GWP of mixtures containing fluorinated greenhouse gases shall be calculated in accordance with Annex IV, as provided for in point 6 of Article 2		Date of prohibition
1. Non-refillable containers for fluorinated greenhouse gases used to service, maintain or fill refrigeration, air-conditioning or heat-pump equipment, fire protection systems or switchgear, or for use as solvents		.....
2. Non-confined direct evaporation systems that contain HFCs and PFCs as refrigerants		.....
3. Fire protection equipment	that contain PFCs	.....
	that contain HFC-23	.....
4. Windows for domestic use that contain fluorinated greenhouse gases		.....
5. Other windows that contain fluorinated greenhouse gases		.....
6. Footwear that contains fluorinated greenhouse gases		.....
7. Tyres that contain fluorinated greenhouse gases		.....
8. One-component foams, except when required to meet national safety standards, that contain fluorinated greenhouse gases with GWP of 150 or more		.....
9. Aerosol generators marketed and intended for sale to the general public for		.....

entertainment and decorative purposes, as listed in point 40 of Annex XVII to Regulation (EC) No 1907/2006, and signal horns, that contain HFCs with GWP of 150 or more		
10.Domestic refrigerators and freezers that contain HFCs with GWP of 150 or more		.....
11.Refrigerators and freezers for commercial use (hermetically sealed equipment)	that contain HFCs with GWP of 2 500 or more	.....
	that contain HFCs with GWP of 150 or more	.....
12.Stationary refrigeration equipment, that contains, or whose functioning relies upon, HFCs with GWP of 2 500 or more except equipment intended for application designed to cool products to temperatures below – 50 °C		.....
13.Multipack centralized refrigeration systems for commercial use with a rated capacity of 40 kW or more that contain, or whose functioning relies upon, fluorinated greenhouse gases with GWP of 150 or more, except in the primary refrigerant circuit of cascade systems where fluorinated greenhouse gases with a GWP of less than 1 500 may be used		.....
14.Movable room air-conditioning equipment (hermetically sealed equipment which is movable between rooms by the end user) that contain HFCs with GWP of 150 or more		.....
15.Single split air-conditioning systems containing less than 3 kg of fluorinated greenhouse gases, that contain, or whose functioning relies upon, fluorinated greenhouse gases with GWP of 750 or more		.....
16.Foams that contain HFCs with GWP of 150 or more except when required to meet national safety standards	Extruded polystyrene (XPS)	.....
	Other foams	.....
17.Technical aerosols that contain HFCs with GWP of 150 or more, except when required to meet national safety standards or when used for medical applications		.....

ANNEX IV

METHOD OF CALCULATING THE TOTAL GWP OF A MIXTURE

The GWP of a mixture is calculated as a weighted average, derived from the sum of the weight fractions of the individual substances multiplied by their GWP, unless otherwise specified, including substances that are not fluorinated greenhouse gases.

Σ (Substance X % x **GWP**) + (Substance X% x **GWP**) + ... (Substance N% x **GWP**), where % is the contribution by weight with a weight tolerance of +/- 1 %.

For example: applying the formula to a blend of gases consisting of 60 % dimethyl ether, 10 % HFC-152a and 30 % isobutane:

$$\Sigma (60\% \times 1) + (10\% \times 124) + (30\% \times 3)$$

→ Total GWP = 13,9

The GWP of the following non-fluorinated substances are used to calculate the GWP of mixtures. For other substances not listed in this annex a default value of 0 applies.

Substance			GWP ₍₁₎
Common name	Industrial designation	Chemical Formula	
methane		CH ₄	25
nitrous oxide		N ₂ O	298
dimethyl ether		CH ₃ OCH ₃	1
methylene chloride		CH ₂ Cl ₂	9
methyl chloride		CH ₃ Cl	13
chloroform		CHCl ₃	31
ethane	R-170	CH ₃ CH ₃	6

propane	R-290	CH ₃ CH ₂ CH ₃	3
butane	R-600	CH ₃ CH ₂ CH ₂ CH ₃	4
isobutane	R-600a	CH(CH ₃) ₂ CH ₃	3
pentane	R-601	CH ₃ CH ₂ CH ₂ CH ₂ CH ₃	5 ⁽²⁾
isopentane	R-601a	(CH ₃) ₂ CHCH ₂ CH ₃	5 ⁽²⁾
ethoxyethane (diethyl ether)	R-610	CH ₃ CH ₂ OCH ₂ CH ₃	4
methyl formate	R-611	HCOOCH ₃	25
hydrogen	R-702	H ₂	6
ammonia	R-717	NH ₃	0
ethylene	R-1150	C ₂ H ₄	4
propylene	R-1270	C ₃ H ₆	2
cyclopentane		C ₅ H ₁₀	5 ⁽²⁾

⁽¹⁾ Based on the Fourth Assessment Report adopted by the Intergovernmental Panel on Climate Change, unless otherwise indicated.

⁽²⁾ Substance not listed in the Fourth Assessment Report adopted by the Intergovernmental Panel on Climate Change, default value on the basis of the GWPs of other hydrocarbons.

ANNEX V

CALCULATION OF THE MAXIMUM QUANTITY, REFERENCE VALUES AND QUOTAS FOR PLACING HYDROFLUOROCARBONS ON THE MARKET

The maximum quantity referred to in Article 15(1) shall be calculated by applying the following percentages to the annual average of the total quantity placed on the market into the Union during the period from 2009 to 2012. From 2018 onwards, the maximum quantity referred to in Article 15(1) shall be calculated by applying the following percentages to the annual average of the total quantity placed

on the market into the Union during period 2009 to 2012, and subsequently subtracting the amounts for exempted uses according to Article 15(2), on the basis of available data.

Years	Percentage to calculate the maximum quantity of hydrofluorocarbons to be placed on the market and corresponding quotas
2015	100 %
2016–17	93 %
2018–20	63 %
2021–23	45 %
2024–26	31 %
2027–29	24 %
2030	21 %

The maximum quantity, reference values and quotas for placing hydrofluorocarbons on the market referred to in Articles 15 and 16 shall be calculated as the aggregated quantities of all types of hydrofluorocarbons, expressed in tonne(s) of CO₂ equivalent.

The calculation of reference values and quotas for placing hydrofluorocarbons on the market referred to in Articles 15 and 16 shall be based on the quantities of hydrofluorocarbons producers and importers have placed on the market in the Union during the reference or allocation period but excluding quantities of hydrofluorocarbons for the usage referred to in Article 15(2) during the same period, on the basis of available data.

Transactions referred to in point (c) of Article 15(2) shall be verified in accordance with Article 19(6) regardless of the quantities involved.

ANNEX VI

ALLOCATION MECHANISM REFERRED TO IN ARTICLE 16

1. Determination of the quantity to be allocated to undertakings for which a reference value has been established under Article 16(1) and (3)

Each undertaking for which a reference value has been established receives a quota corresponding to 89 % of the reference value multiplied by the percentage indicated in Annex V for the respective year.

2. Determination of the quantity to be allocated to undertakings that have submitted a declaration under Article 16(2)

The sum of the quotas allocated under point 1 is subtracted from the maximum quantity for the given year set out in Annex V to determine the quantity to be allocated to undertakings for which no reference value has been established and which have submitted a declaration under Article 16(2) (quantity to be allocated in step 1 of the calculation).

2.1. Step 1 of the calculation

Each undertaking receives an allocation corresponding to the quantity requested in its declaration, but no more than a pro-rata share of the quantity to be allocated in step 1.

The pro-rata share is calculated by dividing 100 by the number of undertakings that have submitted a declaration. The sum of the quotas allocated in step 1 is subtracted from the quantity to be allocated in step 1 to determine the quantity to be allocated in step 2.

2.2. Step 2 of the calculation

Each undertaking that has not obtained 100 % of the quantity requested in its declaration in step 1 receives an additional allocation corresponding to the difference between the quantity requested and the quantity obtained in step 1. However, this must not exceed the pro-rata share of the quantity to be allocated in step 2.

The pro-rata share is calculated by dividing 100 by the number of undertakings eligible for an allocation in step 2. The sum of the quotas allocated in step 2 is subtracted from the quantity to be allocated in step 2 to determine the quantity to be allocated in step 3.

2.3. Step 3 of the calculation

Step 2 is repeated until all requests are satisfied or the remaining quantity to be allocated in the next phase is less than 500 tonnes of CO₂ equivalent.

3. Determination of the quantity to be allocated to undertakings that have submitted a declaration under Article 16(4)

For the allocation of quotas for to the sum of the quotas allocated under points 1 and 2 is subtracted from the maximum quantity for the given year set out in Annex V to determine the quantity to be allocated to undertakings for which a reference value has been established and that have submitted a declaration under Article 16(4).

The allocation mechanism set out under points 2.1 and 2.2 applies.

For the allocation of quotas for and every year thereafter, undertakings that have submitted a declaration under Article 16(5) shall be treated in the same way as undertakings that have submitted a declaration under Article 16(1).

DATA TO BE REPORTED PURSUANT TO ARTICLE 19

1. Each producer referred to in Article 19(1) shall report on:

- (a) the total quantity of each substance listed in Annexes I and II it has produced in the Union, identifying the main categories of application in which the substance is used;
- (b) the quantities of each substance listed in Annex I and, where applicable, Annex II it has placed on the market in the Union, specifying separately quantities placed on the market for feedstock uses, direct exports, producing metered dose inhalers for the delivery of pharmaceutical ingredients, use in military equipment and use in the etching of semiconductor material or the cleaning of chemical vapor deposition chambers within the semiconductor manufacturing sector;
- (c) the quantities of each substance listed in Annexes I and II that have been recycled, reclaimed and destroyed, respectively;
- (d) any stocks held at the beginning and the end of the reporting period;
- (e) any authorization to use quota, specifying relevant quantities, for the purpose of Article 14.

2. Each importer referred to in Article 19(1) shall report on:

- (a) the quantity of each substance listed in Annex I and, where applicable, Annex II it has imported into the Union, identifying the main categories of application in which the substance is used, specifying separately quantities placed on the market for destruction, feedstock uses, direct exports, producing metered dose inhalers for the delivery of pharmaceutical ingredients, use in military equipment and use in the etching of semiconductor material or the cleaning of chemical vapor deposition chambers within the semiconductor manufacturing sector;
- (b) the quantities of each substance listed in Annexes I and II that have been recycled, reclaimed and destroyed, respectively;
- (c) any authorization to use quota, specifying relevant quantities, for the purpose of Article 14;
- (d) any stocks held at the beginning and the end of the reporting period.

3. Each exporter referred to in Article 19(1) shall report on:

- (a) the quantities of each substance listed in Annexes I and II that it has exported from the Union other than to be recycled, reclaimed or destroyed;
- (b) any quantities of each substance listed in Annexes I and II that it has exported from the Union to be recycled, reclaimed and destroyed, respectively.

4. Each undertaking referred to in Article 19(2) shall report on:

- (a) the quantities of each substance listed in Annexes I and II destroyed, including the quantities of those substances contained in products or equipment;
- (b) any stocks of each substance listed in Annexes I and II waiting to be destroyed, including the quantities of those substances contained in products or equipment;
- (c) the technology used for the destruction of the substances listed in Annexes I and II.

5. Each undertaking referred to in Article 19(3) shall report on the quantities of each substance listed in Annex I used as feedstock.

6. Each undertaking referred to in Article 19(4) shall report on:

- (a) the categories of the products or equipment containing substances listed in Annexes I and II;
- (b) the number of units;
- (c) any quantities of each substance listed in Annexes I and II contained in the products or equipment.

APPENDIX 2 – Safety Standards

SCOPE OF STANDARD	NATIONAL STANDARDS	SCOPE OF STANDARD
EN 378 , ISO 5149-1, -2, -3, -4	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps – Safety and environmental requirements
ISO 817: 2014	Do not exist yet (need to be adapted)	Refrigerants — Designation system and safety classification
EN 1012-1, -2	Do not exist yet (need to be adapted)	Compressors and vacuum pumps – Safety requirements Part 1 : Air compressors Part 2 : Vacuum pumps
EN 1127-1	Do not exist yet (need to be adapted)	Explosive atmospheres – Explosion prevention and protection Part 1: Basic concepts and methodology (2011)
EN 1736	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps – Flexible pipe elements, vibration isolators, expansion joints and non-metallic tubes – Requirements, design and installation
EN ISO 4126	Do not exist yet (need to be adapted)	Safety devices for protection against excessive pressure Part 1: Safety valves Part 2: Bursting disc safety devices Part 3: Safety valves and bursting disc safety devices in combination Part 4: Pilot operated safety valves Part 5: Controlled safety pressure relief systems (CSPRS) Part 6: Application, selection and installation of bursting disc safety devices Part 7: Common data
EN ISO 9001	Do not exist yet (need to be adapted)	Quality management systems – Requirements
ISO 11650: 1999	Do not exist yet (need to be adapted)	Performance of refrigerant recovery and/or recycling equipment

EN ISO 12100	Do not exist yet (need to be adapted)	Safety of machinery – General principles for design – Risk assessment and risk reduction
EN 12178	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps – Liquid level indicating devices – Requirements, testing and marking
EN 12263	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps – Safety switching devices for limiting the pressure – Requirements and tests
EN 12284	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps – Valves – Requirements, testing and marking
EN 12693	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps – Safety and environmental requirements – Positive displacement refrigerant compressors
ISO 13043: 2011	Do not exist yet (need to be adapted)	Road vehicles – Refrigerant systems used in mobile air conditioning systems (MAC) – Safety requirements
EN 13136	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps – Pressure relief devices and their associated piping – Methods for calculation
EN 13313	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps – Competence of personnel
EN 13463-1, -5, -6	Do not exist yet (need to be adapted)	Non-electrical equipment for use in potentially explosive atmospheres Part 1: Basic method and requirements Part 5: Protection by constructional safety 'c' Part 6: Protection by control of ignition source 'b'
ISO 13971	Do not exist yet (need to be adapted)	Refrigeration systems and heat pumps – Flexible pipe elements, vibration isolators, expansion joints and non-metallic tubes – Requirements and classification
EN 13980: 2012	Do not exist yet (need to be adapted)	Potentially explosive atmospheres – Application of quality systems
ISO 14903: 2012	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps – Qualification of tightness of components and joints
EN 14276-1, -2	Do not exist yet (need to be adapted)	Pressure equipment for refrigerating systems and heat pumps Part 1: Vessels – General requirements Part 2: Piping – General requirements
EN TR 14739	Do not exist yet (need to be adapted)	Scheme for carrying out a risk assessment for flammable refrigerants in case of household refrigerators and freezers

EN 14797	Do not exist yet (need to be adapted)	Explosion venting devices
EN 14986	Do not exist yet (need to be adapted)	Design of fans working in potentially explosive atmospheres
EN 15198	Do not exist yet (need to be adapted)	Methodology for the risk assessment of non-electrical equipment and components for intended use in potentially explosive atmospheres
EN 15233	Do not exist yet (need to be adapted)	Methodology for functional safety assessment of protective systems for potentially explosive atmospheres
EN 15834	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps — Qualification of tightness of components and joints
EN 16084	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps – Qualification of tightness of components and joints
EN ISO/IEC 17020	Do not exist yet (need to be adapted)	Conformity assessment -- Requirements for the operation of various types of bodies performing inspection
EN ISO /IEC 17024	Do not exist yet (need to be adapted)	Conformity assessment -- General requirements for bodies operating certification of persons
EN ISO / IEC 17025	Do not exist yet (need to be adapted)	General requirements for the competence of testing and calibration laboratories
EN 50110	Do not exist yet (need to be adapted)	Operation of electrical installations Part 1: General requirements Part 2: National annexes
EN 50402	Do not exist yet (need to be adapted)	Electrical apparatus for the detection and measurement of combustible or toxic gases or vapors or of oxygen – Requirements on the functional safety of fixed gas detection system
ISO 5149-1, 2,3,4	Do not exist yet (need to be adapted)	Refrigerating systems and heat pumps — Safety and environmental requirements Part 1: Definitions, classification and selection criteria Part 2: Design, construction, testing, marking and documentation Part 3: Installation site Part 4: Operation, maintenance, repair and recovery

DIN EN 60079-0, -10-1, -14, -15, -17, -19, -20-1	SSH 60079-1; -10; -18	Explosive atmospheres Part 0: Equipment – General requirements Part 10-1: Classification of areas – Explosive gas atmospheres Part 14: Electrical installations design, selection and erection Part 15: Equipment protection by type of protection ‘n’ Part 17: Electrical installations inspection and maintenance Part 19: Equipment repair, overhaul and reclamation Part 20-1: Material characteristics for gas and vapor classification – Test methods and data
DIN EN 60204-1	Do not exist yet (need to be adapted)	Safety of machinery – Electrical equipment of machines Part 1: General requirement
DIN EN 60335-1, 2-24, -2-34, -2-40 ,	SSH IEC 60335-2-40	Household and similar electrical appliances – Safety Part 1: General requirements Part 2-24: Particular requirements for refrigerating appliances, ice-cream appliances and ice makers Part 2-34: Particular requirements for motor-compressors Part 2-40: Particular requirements for electrical heat pumps, air conditioners and dehumidifiers Part 2-89: Particular requirements for commercial refrigerating appliances with an incorporated or remote refrigerant condensing unit or compressor
EN 60812	Do not exist yet (need to be adapted)	Failure Mode and Effects analysis
EN 61160	Do not exist yet (need to be adapted)	Design review
EN 62502	Do not exist yet (need to be adapted)	Analysis techniques for dependability – Event tree analysis
IEC 61882	Do not exist yet (need to be adapted)	Hazard and operability studies
ISO 817	Do not exist yet (need to be adapted)	Refrigerants – designation and system classification
ISO 5149	Do not exist yet (need to be adapted)	Mechanical refrigerating systems used for cooling and heating – Safety requirements
ISO 80079-36:2016	Do not exist yet (need to be adapted)	Explosive atmospheres – Non-electrical equipment for explosive atmospheres – Basic method and requirements

APPENDIX 3 – Council of Ministers Decision No. 466, dated 3.07.2019 on “The approval of the strategic document and the national plans for mitigation of the F-gases and the adaption of climate change (Albanian language)