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Gap analysis and a Roadmap for further legal approximation with the EU climate action acquis pursuant to the Comprehensive and Enhanced Partnership Agreement (CEPA) between Republic of Armenia and the European Union

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The objective of the report is to support the approximation process of Armenian legislative and regulative framework for climate action with its gap analysis with the relevant EU climate acquis as applicable to Armenia and in accordance with the Comprehensive and Enhanced Partnership Agreement the country signed with the European Union.

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Contents

List of abbreviations.....	2
1. Introduction.....	4
2. Executive Summary	6
3. EU Legal Framework Related to Climate Change.....	8
3.1. <i>Acquis related to the implementation of the Paris Agreement</i>	8
3.2. <i>Acquis relating to ozone-depleting substances and fluorinated greenhouse gases</i>	10
3.3. <i>Acquis indirectly related to climate change</i>	11
4. Armenia’s Alignment Commitments with the EU Climate and Air Acquis, pursuant to CEPA	13
4.1. <i>Approximation with the acquis implementing the Paris Agreement</i>	14
4.2. <i>Approximation with the acquis relating to ozone-depleting substances and fluorinated greenhouse gases</i>	16
4.3. <i>Approximation with the acquis indirectly related to climate change</i>	18
5. Identified Gaps in Approximation and Proposed Actions.....	21
<i>Table 5.1: Actions for approximation with the acquis related to PA implementation</i>	22
<i>Table 5.2. Actions for approximation with the acquis related to ODS and F-gases</i>	24
<i>Table 5.3. Actions for approximation with the acquis indirectly related to climate change (air quality and industrial emissions – only provisions relevant to climate change mitigation)</i>	26
6. Conclusions and Recommendations.....	29
7. Proposed Actions for Alignment with the Relevant EU Climate Acquis	30
<i>Table 7.1. Proposed activities for alignment with EU climate-related Acquis in the Republic of Armenia, to be supported within the EU4Climate regional initiative</i>	31

List of abbreviations

AQ	Air Quality
BAT	Best Available Techniques
CAFE	The Ambient Air Quality Directive 2008/50/EC, also called “Cleaner Air for Europe” Directive
CC	Climate change
CEPA	Comprehensive and Enhanced Partnership Agreement
CFCs	Chlorofluorocarbons
CO	Carbon Monoxide
CO₂	Carbon Dioxide
COP	Conference of the Parties
EAA	Environment Agency Austria
EaP	Eastern Partnership countries
EC	European Commission
ECVs	Essential Climate Variables
EEA	European Environment Agency
EMEP	Co-operative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe
ETS	Emission Trading System
EU	European Union
F-gases	Fluorinated gases: hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF ₆) and nitrogen trifluoride (NF ₃)
GCOS	Global Climate Observing System
GD	Government Decree
GHG	Green House Gases
GoA	Government of Armenia
HCFC	Hydrochlorofluorocarbons
HFCs	Hydrofluorocarbons
HCHO	Formaldehyde
ICAO	International Civil Aviation Organization
IED	Industrial Emissions Directive (2010/75/EU)
INDC	Intended Nationally Determined Contribution
IPPC	Integrated Pollution Prevention and Control (former Directive 96/61/EC incorporated into the IED)
LCP	Large Combustion Plant
LRTAP	Long Range Transboundary Air Pollution (Convention)
MBM	Market-Based Measure

MLF	Multilateral Fund (for the implementation of the Montreal Protocol)
MoE	Ministry of Environment
MRV	Monitoring, Reporting and Verification
NC	National Communication
NDC	Nationally Determined Contribution
NEC	National Emission Ceilings
NIR	National Inventory Report
NHS	National Hydrometeorological Service
HMC	Hydrometeorology and Monitoring Center
NO₂	Nitrogen Dioxide
N₂O	Nitrous Oxide
NOU	National Ozone Unit
ODS	Ozone Depleting Substances
PA	Paris Agreement
QA/QC	Quality Assurance / Quality Control
RA	Republic of Armenia
SC	Statistical Committee
SO₂	Sulphur Dioxide
TBT	Technical Barriers to Trade
UNDP	United Nations Development Programme
UNECE	United Nations Economic Commission for Europe
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change

1. Introduction

Republic of Armenia (RA) ratified the UN Framework Convention on Climate Change (UNFCCC) in May 1993, the Kyoto Protocol in December 2002, and subsequently the Paris Agreement (PA) in February 2017. As a Non-Annex I party to the Convention, Armenia does not have quantitative commitments for greenhouse gas (GHG) emissions reduction. The country's share of GHG emissions is estimated at around 0.017% of the global level. However, the Republic of Armenia is voluntarily implementing a range of activities to reduce emissions in contribution to the global efforts for climate change mitigation.

RA submitted its First National Communication in 1998 and since 2012 has regularly provided biennial update reports. The [Fourth National Communication of Armenia published in 2020](#) reflects the country's efforts and achievements in mitigating climate change through growing investments in renewable energy and energy efficiency, improving completeness and transparency of the GHG Inventory, as well as introducing climate change considerations into the national and sectoral strategic development planning.

[Armenia's Intended Nationally Determined Contribution \(INDC\)](#) as a non-Annex I Party was presented to the UNFCCC in September 2015, following the publication of its Third National Communication on Climate Change. The country's total aggregate quantitative contribution under the INDC equal to 633 million tons CO₂eq for the period 2015-2050, or an annual average of 5.4 tons per capita. According to the INDC Armenia “*strives to achieve ecosystem neutral GHG emissions in 2050 (2.07 tons/per capita annual), with the support of sufficient international financial, technological and capacity building assistance*”. On 22 April 2021, the Government of Armenia (GoA) approved the country's updated 2021-2030 Nationally Determined Contribution (NDC) under the Paris Agreement (submitted on 30 April 2021). The EU-funded EU4Climate project, implemented by the United Nations Development Programme (UNDP), has supported the Ministry of Environment in developing the document. The NDC sets an economy-wide 2030 target of reducing GHG emissions by 40% compared with their 1990 level.

The **Ministry of Environment (MoE)** of the Republic of Armenia is designated National Focal Point for the UNFCCC, succeeding in this function the former Ministry of Nature Protection following a substantial governmental reform in 2018. In 2019 a **Climate Change policy department** has been established with the main functions of coordinating the UNFCCC implementation as well as timely development of national communications and biennial reports. The **National Hydro-meteorological Service (NHS)** plays a key role in producing and delivering weather, climate and hydrological information and services. The NHS has operated within the system of the Ministry of Emergency Situations (MoES) between 2008 and 2016, when it was renamed to “Service of Hydrometeorology and Active Influence on Atmospheric Phenomena”. Following the governmental and public administration reform launched in 2018, the Service was merged with the Environmental Monitoring and Information Center and Forest Monitoring Center, thus establishing the **Hydrometeorology and Monitoring Center (HMC)** under the auspices of the MoE (GD No.81 from 30 January 2020). This reform has aimed at laying the ground for implementation of **integrated quantitative and qualitative monitoring** of surface and groundwater resources, as well as air and meteorological conditions.

The **Statistical Committee of the Republic of Armenia (SC)** is assigned with the development, production and dissemination of official statistics in the country, including handling of climate-

related information. A Roadmap for the Development of Climate Change-related Statistics¹ has been developed with the support of the UNECE Statistical Division and adopted in February 2020 by a Resolution of the State Council on Statistics. The Roadmap assesses the current status of climate change-related national statistical system; it sets the priorities and identifies a number of actions for further development of statistics in this field.

An inter-institutional **Coordination Council for implementation of the UNFCCC** was established in 2012, comprising representatives of 11 ministries, the Public Service Regulatory Commission, Academy of Science and the Statistical Committee. The Council is chaired by the Minister of Environment and aims to ensure inter-sectoral coordination for implementation of the national climate change policies. A Working Group is set up to assist the Council, consisting of representatives from ministries and state agencies, as well as independent climate change experts and consultants. The Working Group provides support in meeting UNFCCC reporting obligations of the Republic of Armenia, including development of National Communications, GHG emissions inventories, NDCs and regular reports. **Adjustment and expansion of the Coordination Council’s functions** is planned for 2020 to cover the development of a roadmap, implementation monitoring and periodic review of the NDC, as required by the Paris Agreement.

Development of the **partnership with the European Union (EU)** is a key priority of the country’s contemporary foreign policy. Since the independence of the Republic of Armenia (1991), cooperation with the EU has greatly contributed to carrying out reforms in the fields of economy, justice and public administration, building up democratic society and consolidating institutions dealing with the protection of human rights and fundamental freedoms. On this basis, a **Comprehensive and Enhanced Partnership Agreement (CEPA)** was signed on **24 November 2017**, in the framework of the 5th Eastern Partnership Summit. The CEPA envisages cooperation in a wide variety of sectors including environment, energy and climate change.

On 1 June 2018 provisional application of the Agreement entered into force. One year later the **CEPA Implementation Roadmap** was approved by Decision 666-L of the Prime Minister and endorsed at the second meeting of the Armenia-EU Partnership Council on 13 June 2019. More concrete **action plans** for legal approximation have consequently been developed for the *air quality* and *waste management* sectors. The laws on *environmental impact assessment*, on *access to information* and on *ambient air quality* are under revision in view of aligning with the respective *acquis*. Following ratification of the Kigali Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, a legal approximation plan pursuant to CEPA provisions on *ODS and F-gases* has also been developed. **The present analysis is consistent with this planning process**, since given the recent adoption of the CEPA Roadmap, no implementation report thereon has been produced yet.

For the time of its provisional application so far Armenia has identified certain limitations in institutional, technical and financial capacities to meet its commitments related to environment and climate change under CEPA, as well as to proactively promote national climate action in line with the Paris Agreement. These include also climate mainstreaming in key sectoral policies as energy, transport and agriculture. In order to address these gaps, an analysis of the current climate-related legislation and development of a roadmap outlining EU4Climate support to the Republic of Armenia in alignment with EU *acquis* was initiated in the end of 2019 within the EU4Climate

¹ <https://armstat.am/file/doc/99518228.pdf>

regional programme. The gap analysis is performed by the Environment Agency Austria (EAA)’s international expert assigned with task 3 of the EU4Climate action plan 2019-2020. **Conclusions and recommendations resulting therefrom are summarized in chapter 5** of this report and served as a basis of the road map outlining potential further EU4Climate support.

During consultations with the Armenian competent authorities (facilitated by the UNDP country office) it was made clear that RA is keen to approach the **climate change (CC) and air quality (AQ) provisions in close coordination**. Although this is not directly reflected in the CEPA chapter on Climate Action, the EAA has duly taken the beneficiary country’s endeavor into account in its review of the national provisions vs. climate acquis. At request of the MoE, an analysis of the national draft law on air quality against the respective EU acquis has been performed during the desk review phase of the assignment. The analysis has also covered interrelations between air quality, industrial emissions and climate-related EU legislation. Recommendations have been formulated on this basis and provided to the relevant competent authorities in the RA via the UNDP country office in January 2020. They were discussed online in April 2020 (*web-based discussions due to Covid19 pandemic*), where decision was taken those recommendations to be reflected in the revised draft law on air quality.

Consequent on-line discussions (*carried out between April and July 2020 via email communication mainly*) confirmed the Beneficiary’s willingness to pursue more integrated approach in the approximation with the *climate-* and *air-* related acquis. Such approach is considered especially relevant to the establishment of the national system for emissions measuring, verification, reporting and inventory. Against this background, the present analysis aims at encompassing the **synergy and interlinkages between the legal instruments** in the areas of *climate change*, *air quality* and *industrial emissions*, in view of founding common ground for further EU4Climate interventions in Armenia, thus ensuring economy of scale by possible implementation of certain CEPA commitments in more than one policy areas.

2. Executive Summary

The report hereinafter analyses the EU legal framework directly and indirectly related to climate change mitigation (**chapter 3**) and Republic of Armenia’s alignment commitments with these acquis, pursuant to CEPA. Further in **chapter 4**, it scrutinizes approximation in the national legal system with the acquis implementing the Paris Agreement, regulating ozone depleting substances including F-gases, as well as air quality and industrial emissions legislation indirectly related to climate change. Based on this scrutiny, **chapter 5** summarizes in easy to absorb table format the findings of the gap analysis carried out and the recommendations for further steps in the legal approximation process pursuant to Armenia’s commitments in CEPA. **Chapter 6** wraps up the recommendations into conclusions for each group of acquis examined, which will serve as a basis for planning further actions and support, including from EU4Climate regional project. **Chapter 7** then proposes ten measures to be implemented for a three-year period (2021-2023), taking into account CEPA deadlines and priorities, as well as the current level of approximation assessed in the present report.

In chapter 3 **EU climate-related legislation** from which commitments arise for Eastern Partnership countries, including Armenia, is grouped into three clusters:

- ✓ Acquis related to the implementation of the Paris Agreement sets EU wide legally binding objectives for the period 2021-2030 based on three directives (regulating the EU emission trading system /ETS/, renewable energy, and energy efficiency), as well as the climate change monitoring system. This imposes the need of an integrated approach in building the environment and climate monitoring systems, which ensures consistency and economies at scale.
- ✓ Acquis related to ozone depleting substances (ODS) and fluorinated greenhouse gases (F-gases) which provides for placing on the market, banning, labelling and licensing the import/export of controlled substances, products and equipment that contain, or whose functioning rely upon substances covered by the ODS and F-Gas regulations.
- ✓ Acquis on air quality protection and industrial emissions prevention and control are closely interlinked with the climate change legislation. Therefore, implementing measures in these areas are often applied in synergy. In addition, there is increasing evidence that abatement costs of total benefits can be reduced significantly, if climate change and air pollution control strategies are developed jointly.

The scrutiny of **approximation with the climate-related acquis** in chapter 4 follows the same three-cluster approach and is guided by the respective commitments in CEPA. The latter requires the establishment of a national greenhouse gas inventory system and of a national MRV mechanism by 2026. To address these obligations, the CEPA Roadmap foresees actions that would align the national legislation with selected provisions of the ETS Directive 2003/87/EC and three related regulations (Regulation (EU) No 601/2012, Commission Regulation (EU) No 600/2012, and the Monitoring Mechanism Regulation (EU) 525/2013). **It is recommended** to carry out designation of stationary emission sources in accordance with the Guidance on Interpretation of Annex 1 to the ETS Directive and to apply a synergy approach towards the approximation of relevant provisions. **Regarding MRV** – it is concluded that Armenia has already established the basic national system therefor, in accordance to the existing transparency arrangements under the UNFCCC. It has designated Ministry of Environment as the formal coordinating body and has established a horizontal inter-institutional coordination and verification mechanism. However, the obligations of the various designated institutions for climate-related data reporting, collection, storage and exchange are not regulated by any legally binding instrument. A legal/formal mandate is therefore needed to assign specific roles to each appointed institution and to facilitate the various stages of the process.

As for ODS and F-gases, Republic of Armenia is Party to the Vienna Convention and the Montreal Protocol since October 1999. The country ratified all five amendments to the Montreal Protocol, including the Kigali Amendment, under which it has committed to achieve a reduction of hydrofluorocarbons by 80–85% until 2045. Legal approximation obligations assumed under CEPA include ensuring implementation of the ODS Regulation 1005/2009 and F-gas Regulation 517/2014. Amendments to the Law on ODS extending coverage to include HFCs were therefore adopted in May 2020. Furthermore, an electronic licensing system on ODS and F-gases was developed. It serves e-licensing and collects information that will enable automatic generation of reports.

Under Article 5 to the Montreal Protocol, Armenia is eligible for consuming HCFCs until 2030. Consumption of ODS is strictly limited to the servicing sector and no need for exempted laboratory and analytical uses or critical uses of methyl bromide have ever been identified in the country.

Moreover, obligations to recover, recycle, reclaim and destruct used controlled substances are not fully applicable to Armenia at this stage, since no reclamation and destruction facilities are available in the country. Therefore **it is recommended to reconsider the deadlines** set in the CEPA Roadmap for introducing these particular provisions. **The main needs identified** with respect to acquis approximation in the field of ODS and F-gases are related to the establishment of procedures for monitoring and inspecting leakages of controlled substances as well as reporting and data handling. The legal basis for adopting these provisions is the framework law on the protection of the ozone layer.

With respect to **AQ and IE acquis, indirectly related to climate change** – the Government of Armenia has demonstrated a will to build an integrated system of monitoring GHG and other air polluting emissions and to follow a synergy approach in implementing the interlinked provisions of the two related clusters.

The draft of a new Law on Ambient Air Protection envisaging the establishment of a unified system for registration of harmful substances and GHG emissions is in the process of consultations. **It is recommended** a preliminary assessment on the status and gaps of the air quality monitoring network to be carried out in order to develop respective AQ guidelines and regulations. This could be envisaged together with the establishment of the MRV mechanism in line with the Paris Agreement’s transparency requirements. As regards approximation with the **Industrial Emissions Directive (IED)**, the Report identifies three set of provisions that are **relevant to climate action**: *setting minimum requirements for pollutant emissions from large combustion plants*; *addressing integrated pollution prevention and control (IPPC) for certain large industrial installations and activities*; and *the requirements for public participation in the decision making process*. All three set of provisions are **needed for the approximation with the ETS Directive as well**. Therefore, it is recommended to **address the IED first**, as such approach would greatly contribute to approximation with the *climate acquis*, more specifically with the ETS Directive.

Based on the comprehensive analysis, chapter 6 recommends **fifteen steps to follow in the approximation process**, so that climate and related acquis are all addressed in synergy and complementarity, while respecting the commitments Republic of Armenia has assumed in the CEPA. **Ten out of these fifteen steps have been summarized** in chapter 7, for consultation and selection of priority ones to be considered for support by EU4Climate as of 2021.

3. EU Legal Framework Related to Climate Change

EU climate-related acquis from which commitments arise for the Republic of Armenia can be grouped into three clusters, as explained below.

3.1. Acquis related to the implementation of the Paris Agreement

The EU’s first nationally determined contribution (NDC) under the Paris Agreement is to reduce greenhouse gas emissions by at least **40%** by 2030 compared to 1990. As part of the [European Green Deal](#) launched in December 2019, the European Commission proposed in September 2020 to raise the 2030 GHG emission reduction target to 55% compared to 1990. This proposal was endorsed by the European Council on 17 December 2020, which enabled the EU to present its [revised EU NDC](#) to the UNFCCC on 19 December 2020, enhancing its 2030 target to **55%** GHG emissions reduction compared to 1990.

Other key targets are to achieve at least **32%** share for renewable energy and **32.5%** improvement in energy efficiency (to be revised in the light of the new GHG reduction commitment when adopted). All key EU legislation for implementing these targets was adopted by the end of 2018, setting up EU-wide legally binding objectives for the period 2021-2030. Pursuant to the updated NDC though, the Commission has started the process of making detailed legislative proposals until June 2021, by looking at the *actions required across all sectors*, including increased energy efficiency and renewable energy. The legal package includes:

- The comprehensive **2030 climate and energy framework** comprising:
 - [revised Emission Trading System /ETS/](#) Directive 2003/87/EC;
 - revised [Renewable Energy Directive 2018/2001/EU](#); and
 - amended [Energy Efficiency Directive 2018/1999/EU](#)).
- **Climate Monitoring Mechanism (CMM)** comprising:
 - [Regulation \(EU\) No 525/2013](#) on a mechanism for monitoring and reporting greenhouse gas emissions and for reporting other information at national and Union level relevant to climate change;
 - Reporting requirements under [Commission Implementing Regulation \(EU\) No 749/2014](#) on structure, format, submission processes and review of information reported by Member States pursuant to Regulation (EU) No 525/2013; and
 - requirements for the EU inventory system under [Commission Delegated Regulation \(EU\) No 666/2014](#) establishing substantive requirements for a Union inventory system and taking into account changes in the global warming potentials and internationally agreed inventory guidelines.

The CMM will remain the relevant EU framework for monitoring and reporting GHG emissions until 1 January 2021. From then onwards, it will be replaced by the [Regulation on the Governance of the Energy Union and Climate Action](#), which brings it in line with the transparency requirements of the Paris Agreement.

A **climate change monitoring system** integrates satellite observations, ground-based data and forecast models to monitor and estimate changes in the weather and climate. Since the national monitoring systems all form part of a global network, it is vital that there is as much consistency as possible in the way measurements and observations are made. With this respect, in 1992 the **Global Climate Observing System (GCOS)** was established to ensure that the observations and information needed to address climate-related issues are obtained and made available to all potential users².

As part of its role to provide continuous support to the UNFCCC, GCOS has established 20 Climate Monitoring Principles defining 50 Essential Climate Variables (ECVs)³ to be measured consistently. Among the key ECVs are the *atmospheric variables* measured over land, sea and ice. These include *composition of the ambient air* or more specifically: carbon dioxide, methane and

² From 2008, the Aragats high-mountain station in Armenia (established in 1929) is included in GCOS and has since been providing monthly updated historical data and information to the Network. Aragats is located at 3229 m above sea level and is the only station in the Caucasus region located at such an altitude.

³ Source: GCOS at

<https://public.wmo.int/en/programmes/global-climate-observing-system?name=ClimateMonitoringPrinciples>

other long-lived greenhouse gases (N₂O, CFCs, HCFCs, HFCs and other F-gases), ozone and aerosols, supported by their precursors (in particular NO₂, SO₂, HCHO and CO). The other set of essential variables are *terrestrial* (river discharge, water use, snow cover, glaciers, soil carbon, soil moisture, etc.) and *oceanic* (sea level, sea state, salinity, current, etc.).

The better information available, the more accurately future climate conditions can be assessed at local, regional, national and global levels. It has become particularly important in the context of climate change adaptation needs of the most vulnerable sectors as agriculture, forestry, water management, tourism, etc. This imposes the need of an **integrated approach in building the environment and climate monitoring systems**, which ensures consistency and economies at scale. It is especially relevant for the *atmospheric variables* to be measured according to GCOS Climate Monitoring Principles, and more specifically the *composition of the ambient air*, as pointed out in the previous paragraph.

3.2. Acquis relating to ozone-depleting substances and fluorinated greenhouse gases

Countries' commitments deriving from these *acquis* are related mainly to the establishment of a system for *placing on the market, banning, labelling and licensing the import/export of controlled substances*, of products and equipment that contain, or whose functioning relies upon substances covered by the ODS and F-Gas regulations.

These commitments are similar to the ones that countries undertake under the **Vienna Convention** on the Protection of the Ozone Layer and **Montreal Protocol** on the Protection of the Ozone Layer from Substances that Deplete the Ozone Layer. The 1987 United Nations Environment Programme (UNEP) Montreal Protocol is widely recognized as one of the most successful multilateral environmental agreements to date whose implementation has led to a tangible global decrease in the impact of ODS on the atmosphere. The Agreement covers the phase-out of over 200 individual ODS and controls the consumption and production of these substances, not their emissions. It phases down their consumption and production in a step-wise manner, with different timetables for *developed* and *developing* countries (referred to as “[Article 5 countries](#)”). Under this Treaty all parties have specific responsibilities related to the phase out of the different groups of ODS, control of their trade, annual reporting of data and national licensing systems to control ODS imports and exports. Developing and developed countries have *equal but differentiated responsibilities*, yet both groups of countries have binding, time-targeted and measurable commitments.

Since its entry into force on 1 January 1989, the Montreal Protocol has undergone five substantial revisions⁴, most recent of which the **Kigali Amendment**, which entered into force on 1 January 2019 and added HFCs to the list of controlled substances. Upon 30 November 2020, 112 Parties⁵ to the Protocol accepted the Amendment, committing to cut the production and consumption of HFCs by more than 80 % over the next 30 years. The EU ratified the Kigali Amendment on 27 September 2018.

Specific **EU acquis implementing these international treaties** are:

- [Regulation \(EC\) No 1005/2009](#) on substances that deplete the ozone layer (the ODS Regulation); and

⁴ <https://ozone.unep.org/treaties/montreal-protocol/amendments>

⁵ https://treaties.un.org/Pages/ViewDetails.aspx?src=IND&mtdsg_no=XXVII-2-f&chapter=27&clang=en

- [Regulation \(EU\) No 517/2014](#) on fluorinated greenhouse gases (the F-gas Regulation).

The EU has gone beyond the rules of the Montreal Protocol to tackle some of the remaining challenges in this area. While the Montreal Protocol regulates the production of these substances and their trade in bulk, the **Ozone Regulation from 2009** *prohibits their use* in most cases. Moreover, it regulates not only substances in bulk, but also those *contained in products and equipment*. In addition, Regulation (EC) 1005/2009 sets *licensing requirements* for all exports and imports of ODS. It also covers *five new substances* in addition to those (over 90 chemicals) controlled under the Montreal Protocol.⁶

Regarding **F-gases** – they are often used as *substitutes* for ozone-depleting substances (CFCs, HCFCs and halons), because they do not damage the atmospheric ozone layer. However, F-gases are powerful GHGs, with a global warming effect up to 23 000 times greater than CO₂, and their emissions has been rising sturdily until between 1990 and 2014⁷. Hydrofluorocarbons (HFCs) are considered the most relevant F-gas group from a climate perspective, even though they are relatively short-lived, while the other two F-gas groups – perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆) can remain in the atmosphere for thousands of years.

The current EU F-gas Regulation (517/2014), which applies since 1 January 2015, replaced the original one from 2006. It strengthened the previous measures by *limiting the total amount* of F-gases that can be sold in the EU and *phasing them down in steps* by 2030. In addition, the Regulation *bans the use of F-gases in many new types of equipment* where less harmful alternatives are widely available, such as fridges, air conditioning, foams and aerosols. It also requires *checks, proper servicing and recovery of the gases* at the end of the equipment's life, thus preventing emissions of F-gases from existing equipment. Thanks to the current F-gas Regulation, the EU's F-gas emissions will be cut by two-thirds until 2030 compared to their 2014 levels.

3.3. Acquis indirectly related to climate change

On EU level the **policies on climate change, air quality protection and industrial emissions control are closely interlinked**, therefore implementing measures in these areas (including *monitoring, information sharing and reporting*) are often applied in synergy. Ground-level ozone and black carbon aerosols for instance are air pollutants and warming agents like CO₂, which at high levels seriously damage human health and vegetation, including crop yields. Poor air quality is also caused by emissions of nitrogen oxides, methane and other volatile organic compounds that combine in the lower atmosphere to produce ozone, thus contributing to climate change. Ozone reductions are therefore best achieved by cutting emissions of all precursors.

Furthermore, many of the sources of air pollutants and greenhouse gases are the same. The need for a **combined strategic planning that meets the challenges of both climate change and air pollution** has thus become more and more obvious for the benefit of a well-informed political decision-making. There is also increasing evidence that abatement costs in relation to the total benefits can be reduced significantly if climate change and air pollution control strategies are developed jointly. Combining both sets of policies provides a win-win situation whereby medium-

⁶ Source: Ozone-depleting substances reports provided by the European Environment Agency (EEA).

⁷ According to EEA data, emissions of F-gases in the EU almost doubled from 1990 to 2014 – in contrast to emissions of all other GHGs, which were reduced. Thanks to EU legislation on fluorinated gases, F-gas emissions have been gradually falling since 2015.

term efforts to control air pollution will support long-term strategies that aim to limit climate change.

Hence, a relevant gap analysis should not treat these issues separately as we strive to achieve sustainable low carbon development in a cost-effective way. **Such integrating approach was applied to the acquis approximation gap analysis undertaken for the Republic of Armenia**, at request of the main Beneficiary (MoE). More specifically, the following air- and emissions-related acquis have been considered together with the climate change ones, when assessing the needs and recommending further actions for legal approximation in both policy areas.

- [The Ambient Air Quality Directive 2008/50/EC](#), also called “Cleaner Air for Europe” or CAFE Directive.

It consolidated the original Air Quality Framework Directive 96/62/EC and its 3 daughter directives establishing **standards for a range of pollutants** including SO₂, ozone, particulate matter (PM₁₀) and nitrogen dioxide (NO₂). It also sets standards for fine particulate matter (PM_{2.5}). On international level these same pollutants are regulated through **emission standards (ceilings) set in the Gothenburg Protocol** to the Convention on the Long-Range Transboundary Air Pollution (**LRTAP Convention**). In the EU the [National Emission Ceilings \(NEC\) Directive 2016/2284/EU](#) is implementing the Gothenburg Protocol.

- **CAFE and NEC, together with [Directive 2004/107/EC](#)** relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air, provide the current framework for the control of ambient concentrations of air pollution in the EU. The control of emissions from mobile sources, improving fuel quality and integrating environmental considerations into the transport sector are also part of this framework, but not a subject of the present analysis.
- The [Industrial Emissions Directive \(IED\) 2010/75/EU](#), which has consolidated the EU legal framework on industrial emissions comprising 7 older pieces of legislation, namely: Directive 96/61/EC on integrated pollution prevention and control (IPPC) and 6 so-called “sectoral” directives – on large combustion plants (LCP), on waste incineration, on solvents emissions, and 3 directives related to the production of titanium dioxide.

Recent data from the European Environment Agency (EEA) show that fuel combustion and fugitive emissions from fuels (without transport) was responsible for 53 % of the EU-27 greenhouse gas emissions in 2018, which makes it the highest GHG emissions source. The main piece of legislation *regulating emissions from large combustion plants and industrial installations* is namely the **Industrial Emissions Directive**. While the **EU ETS** is the key EU policy instrument for reducing industrial GHG emissions *cost-effectively*.

All **installations covered by the IED** (around 50 000) require a *permit* to operate. Permit conditions are based on the respective “BAT Conclusions”, where the Best Available Techniques (BAT) and the associated BAT Emission Levels are defined for each particular industrial sector. The IED regulates granting and reviewing of integrated permits and introduces minimum requirements for environmental inspections of the installations and activities in its scope, as well as self-monitoring and reporting of compliance with the permits by the economic operators.

As for the **ETS Directive** – it is mainly dealing with CO₂ emissions and applies to heavy energy-using installations in power and heat generation, as well as several energy-intensive manufacturing

industries. The ETS includes more than 11 000 power stations and industrial plants across the EU, covering around 45% of total GHG emissions from the EU countries.

Participants in the ETS must have an *approved monitoring plan*, according to which they commit to measure their emissions and *report on an annual basis*. The monitoring plan is incorporated in the *integrated permit* that is issued to each installation pursuant to the IED. This is how **the IE and ETS directives are interlinked** and the implementation of the latter is not feasible without introducing certain provisions deriving from the former (namely integrated permitting, respective BATs, monitoring and reporting provisions). Therefore, **coordination with the permitting provisions of the IED** is explicitly required by Article 8⁸ of the consolidated ETS Directive.

4. Armenia’s Alignment Commitments with the EU Climate and Air Acquis, pursuant to CEPA

Following the integrating approach of EU acquis related to **climate change, air quality protection and industrial emissions**, commitments arising for Armenia pursuant to CEPA have also been grouped into three clusters, as elaborated further below. It should be acknowledged that many provisions of the environment acquis appear as pre-condition for the application of the climate ones. These include but are not limited to: setting up emission limit values and caps on concentration of pollutants; introduction of integrated permitting system and BAT requirements; establishment of public consultation and access to information procedures; development of integrated environmental monitoring and information systems, etc.

Approximation with the *climate-related* acquis is regulated by **CEPA Annex IV to Chapter 4 “Climate Action” of Title V “Other Cooperation Policies”**. It covers the acquis related to implementation of the Paris Agreement, Vienna Convention and Montreal Protocol on ODS and F-gases. Approximation with the acquis related to *air quality and industrial emissions* is regulated by **CEPA Annex III to Chapter 3 “Environment” of Title V**.

As regards approximation with the acquis on *renewable energy sources and energy efficiency*, they are covered by **CEPA Annex II to Chapter 2 “Energy” of Title V**, including:

- Directive 2009/28/EC on the promotion of the use of energy from renewable sources;
- Directive 2012/27/EU on energy efficiency; and
- Directive 2010/31/EU on the energy performance of buildings.

Commitments therein comprise making amendments to the framework laws on energy, on energy saving and renewable energy, to the Law on the Public Services Regulatory Body, as well as to the technical regulations on energy saving and energy efficiency. According to the CEPA Roadmap, support for implementing these alignment commitments is provided by the EU4Energy initiative, as well as various energy efficiency and renewable energy projects benefitting from CEPA Reform Agenda Facility and bilateral financing. Therefore, **the approximation with the energy-related acquis is not subject to the present gap analysis**.

⁸ **Article 8. Coordination with Directive 2010/75/EU.** “Member States shall take the necessary measures to ensure that, where installations carry out activities that are included in Annex I to Directive 2010/75/EU of the European Parliament and of the Council, the conditions and procedure for the issue of a greenhouse gas emissions permit are coordinated with those for the issue of a permit provided for in that Directive. The requirements laid down in Articles 5, 6 and 7 of this Directive may be integrated into the procedures provided for in Directive 2010/75/EU.”

4.1. Approximation with the acquis implementing the Paris Agreement

The approximation efforts in this cluster are to be focused mainly on **ensuring compliance with the transparency requirements** of the UNFCCC and the PA⁹. More specifically, this applies to the preparation and review of national GHG emission reports and inventories (NIRs), national communications (NCs) and biennial update reports (BURs) required under the existing measurement, reporting and verification (MRV) system for developing countries¹⁰, which are likely to stay the same under the Paris Agreement’s enhanced transparency framework.

In line with these transparency requirements, CEPA Article 52(a) and (b) requires the establishment of a **national greenhouse gas inventory system**, while Article 54 (b),(d),(e) and (f) concerns the establishment of a **national MRV mechanism**. The deadline set up in CEPA for approximation with these provisions is “*within 8 years of the entry into force of the Agreement*”, or 2026. To address these commitments, the CEPA Roadmap foresees actions (items 120-123) that would align the national legislation with selected provisions of **one directive** and **three regulations**, as follows:

- ETS Directive 2003/87/EC¹¹ (more specifically the provisions on identifying GHGs and large emitters thereof, pursuant to articles 14-17, annexes I and II);
- Regulation (EU) No 601/2012 on the monitoring and reporting of GHG emissions¹²;
- Commission Regulation (EU) No 600/2012 on the verification of GHG emission reports and tonne-kilometre reports and the accreditation of verifiers, pursuant to Directive 2003/87/EC¹³;
- Monitoring Mechanism Regulation (EU) 525/2013¹⁴.

Regarding the *aviation activities* and their emissions, CEPA states that the implementation of the provisions of the ETS Directive, Regulations 601/2012 and 600/2012 are *conditional* on the outcome of the ICAO deliberations on a Global Market-Based Measures (MBM) Scheme. Therefore, approximation with these particular provisions is *not subject to the present analysis*.

Development and sharing of GHG emission data in Armenia, needed for implementation of the UNFCCC transparency requirements, is regulated by:

- ✓ Commitments under the UNFCCC, in particular articles 4.1 and 12.1, which provide the legal basis for developing the GHG inventory.
- ✓ Government Decree No 49 from 8 December 2016, which includes measures to implement the commitments taken by the RA pursuant to international treaties, including: UNFCCC and the Paris Agreement, Vienna Convention on Protection of the Ozone Layer, the UN Convention on Biodiversity and the Cartagena Protocol on Biosafety.

⁹ For more information on the existing and planned transparency framework, see the [Guide to transparency under the UNFCCC and the Paris Agreement](#)

¹⁰ [Handbook on Measurement, Reporting and Verification for developing country Parties](#)

¹¹ Directive 2003/87/EC has been changed. Current [consolidated version](#) from 01/01/2020 should be considered.

¹² Regulation (EU) No 601/2012 is still in force, but has been changed. Current [consolidated version](#) from 01/01/2019 should be considered upon approximation.

¹³ No longer in force! Repealed as of 31/12/2018 and replaced by [Commission Implementing Regulation \(EU\) 2018/2067](#) on the verification of data and on the accreditation of verifiers pursuant to Directive 2003/87/EC.

¹⁴ Regulation (EU) 525/2013 is still in force, but has been changed. Current [consolidated version](#) from 24/12/2018 should be considered.

- ✓ Article 34 of the Law on ambient air protection, which provides for public and private bodies to emit pollutants in the air as a result of their economic activities *only with permission* of the ambient air protection authorities (MoE) and *only on condition* that no adverse effects on climate are caused.
- ✓ Article 36 of the Law on ambient air protection, which requires that the *types and quantities of substances* emitted to air and their impacts (including on climate change) are registered according to a procedure established by the government.
- ✓ Government Decree No 259, form 22 April 1999 on approval of the State Register of Hazardous Impacts on Atmospheric Air, which defines the *content, goals and objectives of the registration system* for air emissions and their impacts.

Meteorological, climatic, hydrological and geophysical observations for the entire territory of Armenia are performed by the HMS (under the MoE since January 2020). The observation network consists of 47 stations, which collect meteorological and climatic data. Out of these, 23 stations perform automatic monitoring and 20 stations transmit data for global exchange. The network includes 6 high-mountain remote stations, among which Aragats (established in 1929) has the longest time series of data on precipitation, temperature and other meteorological parameters, therefore playing an important role for regional climate change studies¹⁵.

The **Statistical Committee** is in charge with handling and disseminating official statistical information, including climate-related data, in the country. The **Roadmap for the Development of Climate Change-related Statistics** (adopted in the beginning of 2020) recognizes the need to acquire new knowledge and expertise through training and building partnerships with other information providers and experts. It also recognizes that there is a need for organizational changes to support the development of climate change-related statistics across the entire statistical system, including data reporting, collection, storage and exchange. EU4Climate may contribute to setting up the basis for such organizational changes.

The MoE is responsible for the overall coordination of the NIR, BUR and NC development, while **national verification and approval** thereof is carried out by the Inter-agency Coordination Council, pursuant to Decree No 49/08.12.2016.

In conclusion for the cluster of acquis implementing the PA:

It is acknowledged that as a non-Annex I Party to the UNFCCC Armenia has already established the **basic national system for MRV under the existing transparency arrangements**. It has designated a formal coordinating body (MoE), as well as other institutions involved in the process, and has established a horizontal inter-institutional coordination and verification mechanism.

However, **obligations of the various designated institutions for climate-related data reporting, collection, storage and exchange are not regulated by any legally binding instrument**. A legal/formal mandate is needed to assign specific roles to each appointed institution and to facilitate the various stages of the process. A legal/formal mandate can also help the coordinating body to mobilize necessary expertise, in particular through appointment of the focal points among the stakeholders concerned. It could be in the form of implementing regulation (on MRV) or legally binding guidelines adopted by Government Decision.

¹⁵ Source: 4th National Communication of Armenia

As for the **designation of installations and GHGs in the scope of the ETS Directive** (Annexes I and II) – **there is no legal basis neither national provisions regulating this matter**. It is recommended to carry out the designation on the basis of the [Guidance on Interpretation of Annex I of the EU ETS Directive](#) and to apply a **synergy approach with the approximation of relevant provisions of the Industrial Emissions Directive**, more specifically: Chapter III and Annex V *setting minimum requirements for pollutant emissions from LCPs*; Chapter II and Annex I *addressing integrated pollution prevention and control* (IPPC) and BAT for certain large industrial installations and activities; as well as Annex IV providing for *public participation in the decision making process* (see also sections 3.3. and 4.3).

4.2. Approximation with the **acquis relating to ozone-depleting substances and fluorinated greenhouse gases**

The **acquis** regulating placement on the market and use of ODS and F-gases are related to the implementation on EU level of the **Vienna Convention** and the **Montreal Protocol with its Amendments**. Their provisions are trade- and use- related, therefore approximation with the relevant EU **acquis** is required also in view of reducing technical barriers to trade (TBT). Republic of Armenia is Party to both international treaties since October 1999. Targeted action under these treaties began in 2000 with the development of the Country Program which was completed in 2002. Armenia was initially classified as a non-Article 5 Party eligible to receive support from the Global Environmental Facility (GEF), but since 2002 this statute has changed and **the country operates under Article 5 of the Protocol**, being qualified for international assistance under the Multilateral Fund (MLF) for implementation of the Montreal Protocol.

Armenia has accepted all five amendments to the Montreal Protocol, including the **Kigali Amendment**, ratified in March 2019.¹⁶ Under the Kigali Amendment the country has committed to gradually limit the use of hydrofluorocarbons (HFCs) starting from 2024, and to achieve a reduction thereof by **80–85% until 2045**. The development of an action programme for F-gases use and reduction is envisaged to that end, targeting support by MLF.

A **National Ozone Unit (NOU)** was established in 2005 at the Ministry of Nature Protection as government unit responsible for managing national programmes to comply with the Montreal Protocol. This is a program implementation unit operating to date under the auspices of the **Ministry of Environment**, which is the designated competent authority for the Vienna Convention, responsible for the development and implementation of policy and legislation related to the protection of ozone layer and regulation of placing on the market ODS, F-gases and ODS-containing equipment. The **customs authorities** are assigned with authorization of the import, export and transit of substances that deplete the ozone layer, based on import/export license granted by the Government within the quota pursuant to the relevant international arrangements approved by the Government pursuant to the relevant international arrangements.

The respective obligations of RA for legal approximation are reflected in CEPA Article 54(j) and include more specifically measures to ensure implementation of the following EU **acquis** (see also section 3.2):

¹⁶ Law on Ratification of the Kigali Amendment by the Republic of Armenia (in Armenian: <http://www.irtek.am/views/act.aspx?aid=151181>), whilst according to the UN system 02 May 2019 is registered as the date of ratification when the instrument of ratification has been placed with the UN Depositary.

- **ODS Regulation 1005/2009**; and
- **F-gas Regulation 517/2014**.

CEPA Roadmap sets a deadline “*within 6 years of the entry into force of the Agreement*” or 2024 for the following **committed activities in the field of ODS and F-gases** (items 120-123):

- ✓ adoption/completion of national legislation and designation of competent authority(ies);
- ✓ establishment of a system for labelling of products and equipment that contain, or whose functioning relies upon substances covered by the ODS and F-gas regulations;
- ✓ establishment of reporting systems for acquiring emission data from the relevant sectors;
- ✓ establishment of a ban on the production and placing on the market of controlled substances, except for specific uses;
- ✓ definition of the conditions for production, placing on the market and exempted use of controlled substances;
- ✓ establishment of a licensing system for the import and export of controlled substances for exempted uses and reporting obligations for respective undertakings;
- ✓ establishment of procedures for monitoring and inspecting leakages of controlled substances and obligations to recover, recycle, reclaim and destruct used substances.

According to the Roadmap, the Law on ozone-depleting substances and secondary acts regulating the use of ODS and their alternatives that are currently in force in Armenia required scope enlargement in order to include provisions on fluorinated greenhouse gases. **Amendments to the Law on ODS** were adopted to that end on 26 May 2020, changing the title of the Law (to *Law on the protection of the ozone layer*) and extending its coverage to include HFCs. The **list of HFCs** was approved a couple of months later, through Government Resolution No 1368-N¹⁷, adopted on 20 August 2020.

Furthermore, an **Electronic licensing system on substances that deplete the ozone layer** has been developed, encompassing F-gases as well. It serves e-licensing and collects information that will enable automatic generation of reports. The developed module was handed over to the State Revenue Committee in June 2020 in view of incorporating it further into the Government-run unified information system.

A general conclusion drawn for this cluster is that the national ODS legislation¹⁸ in the RA is currently **in line with the requirements of the Montreal Protocol**, and the main commitments related to HFCs under the Protocol have also been reflected in the regulatory framework. The consultations with national experts from the MoE and NOU during the gap analysis showed that some changes in legislation to better regulate *reporting and data handling*, as well as *training* of personnel and *awareness rising* are required in order to further approximate with the acquis related to ODS and F-gases, while also implementing the Kigali Amendment into the national regulatory system.

On the other hand, Armenia’s *equal but differentiated responsibilities* as an **Article 5 country to the Montreal Protocol** should be taken into account in the acquis approximation process. RA is eligible for consuming HCFCs until 2030 as per the phase-out schedule allowing the servicing tail

¹⁷ In Armenian: <http://www.irtek.am/views/act.aspx?aid=106829>

¹⁸ <http://saveozone.am/post/iravakan-akter>

until 2040. Consumption of ODS is strictly limited to the servicing sector, and no need for exempted laboratory and analytical uses or critical uses of methyl bromide have ever been identified in the country. With this respect, defining conditions for the production, placing on the market and use of controlled substances *for exempted uses* is considered not conform to its current needs. Moreover, establishment of obligations to *recover, recycle, reclaim and destruct used controlled substances* (Article 22) is not fully applicable to Armenia at this stage, since no reclamation and destruction facilities are available in the country. Therefore, the **deadlines set in the CEPA Roadmap for introducing these particular provisions** should be reconsidered as *conditional upon* availability of reclamation and destruction infrastructure in the country, depending on available funding.

The main identified needs with respect to *acquis* approximation in the field of ODS and F-gases are related to the **establishment of** procedures for *monitoring and inspecting leakages* of controlled substances, as well as *reporting and data handling* thereon. Legal basis for adopting these provisions is provided by the framework Law on the protection of the ozone layer, as last amended in 2020.

Regular trainings of competent authorities and relevant companies’ personnel, as well as **awareness raising campaigns** are also needed as part of capacity building measures related to implementation of the Montreal Protocol and the national ODS legislation approximated with the EU *acquis*.

As regards the **F-gas Regulation – preliminary assessments and a road map** is needed for approximating its specific provisions. This should be done by taking into account Armenia’s obligations as “Article 5 country”. With this respect, the **different phase-out commitments and timeframes** need to be reflected in the CEPA Roadmap (*which currently foresees 2024 as deadline for all required provisions*).

4.3. Approximation with the *acquis* indirectly related to climate change

According to the 4th NC of Armenia, in 2016 nearly 83% of CO₂ emissions originated from fuel combustion, comprised emissions generated from natural gas combustion. Therefore, **addressing energy-intensive activities** by capping the allowed emissions in the air through relevant permits, and by verifying compliance through regular monitoring and reporting has been brought higher in the RA’s reform agenda. Moreover, by merging in January 2020 the two institutions responsible for *environmental monitoring* and for *climate-related services* into a joint Hydrometeorological and Monitoring Center (HMC), the GoA has demonstrated a will to build an **integrated system of monitoring GHG and other air polluting emissions**, as defined by the respective climate and air quality legislation. Thus, ground-layer *monitoring of atmospheric air* is currently implemented by the HMC in 11 cities of the country, using automatic, passive and active sampling methods to measure mainly three air pollutants (SO₂, NO₂ and dust). The same institution is also assigned with *climate-related functions* as hydrometeorological monitoring and measurement of GHG.

In light of the above, an **integrated approach has been applied in the present gap analysis**, which was extended to cover the *acquis* that are *relevant and indirectly related* to climate change (*see also section 3.3*). More specifically, these are: the provisions to establish a system of regular air

quality monitoring pursuant to the Air Quality Directive (CAFE); setting up emission limit values for large combustion plants pursuant to the Industrial Emissions Directive; as well as establishment of procedures for integrated permitting and promotion of BATs in the sectors covered by the IED. It is admitted that these provisions are closely interlinked with the climate-ones pursuant to the ETS Directive and MRV Regulation. **Such integrated approach aims at ensuring economy of scale** by possible implementation of certain CEPA commitments in more than one policy areas, namely *climate change, air quality and industrial emissions*.

Air quality protection policy is considered in CEPA Chapter 3 (Environment), Article 46(1b). Closely related to air quality protection are the **provisions on industrial pollution** in Article 46(1f), as well as the **Climate Action Chapter**, more specifically Articles 52 and 54 therein. The performed analysis identified possible interlinks between the three policy areas, and recommendations for further approximation are given with this respect.

Regarding international commitments in the area of *air quality protection*, Republic of Armenia is Party to the **LRTAP Convention** since 1997. The only CLRTAP Protocol ratified by the country is the one on Long-term Financing of the Co-operative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (**EMEP**). The **Gothenburg Protocol is signed** on 01.12.1999, but not ratified so far. Further ratifications of CLRTAP protocols by Armenia are not foreseen in CEPA, therefore on international level the country is **not legally bound by emissions reduction commitments** for the major air pollutants addressed thereby. Those are to be set on national level.

As for the country’s commitments for legal approximation with the EU acquis in the areas of *air quality* and *industrial emissions*, the **Roadmap on implementation of CEPA** envisages the adoption of national provisions as follows:

- Development of a draft **Law on Protection of the Ambient Air** and respective implementing regulations, “*in line with the EU directives*”. This reference means more specifically alignment with the **Ambient Air Quality Directive 2008/50/EC**, **Directive 2004/107/EC** relating to arsenic, cadmium, mercury, nickel and polycyclic aromatic hydrocarbons in ambient air, and **Directive 1999/32/EC** relating to reduction in the sulphur content of certain liquid fuels. The timetable for development of these provisions is between 2018 and 2026 for the various requirements (items 94-98 in the Roadmap). The AQ legal framework shall provide for:
 - ✓ **standards** for methodological assessment and classification of air quality zones and agglomerations;
 - ✓ a **system to assess** ambient air quality in relation to air pollutants;
 - ✓ requirements for the **development of air quality plans** for zones and agglomerations where levels of pollutants exceed limit or target values;
 - ✓ a reliable system for regular **air quality monitoring**.

Relevant to climate action are the provisions related to the establishment of a reliable system for *air quality monitoring* and mechanisms for *air quality assessment* in relation to the various air pollutants.

- Introduction of the main requirements of **Directive 2010/75/EU concerning industrial emissions (IED)** into the national legislation within 6 years of the Agreement’s entry in force,

namely by 2024 (items 109.1-109.7 in the Roadmap). More specifically, the following provisions of the IED shall be introduced into the national legislation:

- ✓ principles and procedures of **integrated environmental permitting**, including the promotion of BAT;
- ✓ setting of **emission limit values** for pollutants by large combustion plants (possibly other major industrial activities as well);
- ✓ establishment of a **compliance monitoring mechanism** (i.e. minimum requirements for inspection of compliance with the permit conditions).

Relevant to climate action (especially to ETS) are all provisions related to *permitting, emission limit values* (for LCP, but also other energy intensive industries covered by the IED), *compliance monitoring and reporting*.

In view of partly implementing the above described CEPA provisions related to *air quality policy* in Armenia, concept of a **new Law on Ambient Air Protection** (to replace the existing one from 1994) was adopted by Government Decree on 15 December 2016. In 2019 the draft was presented to the Government for consultations and consequent adoption. It is still undergoing revisions to address comments from the consultation process. Among other modifications, the draft Law envisages the establishment of a **unified system for registration of harmful substances and GHG emissions**, which will ensure comparability and enhance reliability of information presented by Armenia pursuant to its reporting obligations under key international treaties (as the PA and LRTAP Convention).

With respect to **Industrial Emissions Directive** – a new legal act has been considered for partial approximation, but no decision is taken yet on its scope and objectives.

The EU funded project “Assistance to RA Ministry of Justice in Legal Approximation in line with EU Standards” has developed a **targeted Action Plan for legal approximation in the field of air quality**. The Plan envisages fourteen concrete activities to meet the CEPA provisions in this area, four out of which are considered relevant to the climate action and to the present analysis¹⁹, as follows:

- Improve and finalize new Law on Ambient Air Protection (by June 2022);
- Define upper and lower assessment thresholds and limit values in ambient air (by June 2024);
- Develop guidelines for air quality monitoring and assessment (no deadline established);
- Draft by-law/s (one or more Regulations) on details concerning air quality monitoring, data collection, measurement points, analysis, evaluation and rules of operation (by June 2026).

This Action Plan does not address the setting of *emission limit values* for industries, *permitting, inspection and compliance monitoring*. All these activities shall be addressed in **another plan relating to the CEPA chapter on industrial pollution and industrial hazards**. Such a plan could be subject of support by the EU4Environment regional project, more specifically its Output 3.1: “Smart” regulation of environmental impacts²⁰. **Priority should be given** to the establishment of

¹⁹ For more details, see Activities 1, 3, 5 and 6 in the Action Plan.

²⁰ According to the project Inception Report, Armenia has expressed strong interest in **EU4Environment Activity 3.1.1** “Reforming regulatory regimes for large emission sources, including State Owned Enterprises” and should plan further actions with this respect.

procedure for integrated permitting, emission limit values for large combustion plants, reporting and monitoring, which are relevant to climate action.

Based on the observations presented above, the **following general recommendations** are formulated for the cluster of AQ and IE acquis, indirectly related to climate change mitigation.

- Provisions related to emission limit values, monitoring, assessment, permitting and compliance enforcement are interlinked in the *air quality*, *industrial emissions* and *climate change* areas, therefore an **integrated approach should be applied throughout the process of approximation with the respective EU acquis**.
- **The new Law on Ambient Air Protection** should be completed and ensure a “legal umbrella” for future *air quality monitoring and assessment* in Armenia. Where concrete technical provisions (e.g. limit values, assessment methodologies, etc.) are not included in the law, make sure it provides the **legal basis and clear timeframe** for their establishment in implementing regulations.
- Preliminary assessment should be carried out on the **status and gaps of the air quality monitoring network**, in view of developing respective guidelines and implementing regulations. Possibility for such assessment is currently **considered for support** by UNDP-Armenia and the Environment Agency Austria in the framework of EU4Climate. This could be envisaged together with the establishment of the MRV mechanism in line with the Paris Agreement’s transparency requirements.
- Decide which **provisions of the Industrial Emissions Directive** will be approximated by the Air Quality Law, e.g. permitting, emission limit values, inspection requirements, and which ones will be addressed through another legal act (e.g. Law on Industrial Emissions). Most important from climate action perspective is to **introduce proper permitting procedures for emitting in the air, based on emission limit values**. Development of a Road map for introducing these provisions into the national legislation could be envisaged for support by the EU4Environment regional project.

5. Identified Gaps in Approximation and Proposed Actions

This chapter presents in short the **findings of the gap analysis carried out** with respect to acquis *directly or indirectly relating to climate change* and summarizes the **recommendations for further steps in the legal approximation process** in the Republic of Armenia, pursuant to CEPA Chapter 4 and Annex IV, as well as the provisions of Chapter 3 and Annex III covering acquis related to ambient air quality and industrial emissions.

The tables below summarize the **actions planned** in the CEPA Roadmap, **progress achieved to date**²¹, **needs identified** for further support and **recommended actions** with respect to the three clusters of legal approximation, subject to the present analysis.

²¹ In the absence of progress report on CEPA implementation at this stage, it is assessed on the basis of Q&A communication with the Beneficiary (MoE), UNDP country office and designated local experts.

Table 5.1: Actions for approximation with the acquis related to PA implementation

EU Acquis	Commitments in CEPA Roadmap 2019	Dead-line	Progress achieved	Needs (gaps) identified & Recommended Action
CHAPTER 4: CLIMATE ACTION				
Article 52, points (a), (b) Article 54, point (b), (d), (e), (f)				
Articles 14, 15, 16(1), 17 of Directive 2003/87/EC (ETS)	<ul style="list-style-type: none"> Adoption of national legislation and designation of competent authority/ies Establishment of a system for identifying relevant installations and for identifying greenhouse gases (Annexes I and II of the ETS Directive) 	2026	<p>The new Law on Ambient Air Protection (<i>under development</i>) is expected to partly approximate the ETS Directive by defining competent authority and establishing a unified system for registration of harmful substances and GHG emissions.</p>	<p>There are no national provisions regulating the identification of installations and GHGs pursuant to Annexes I and II of the ETS Directive. To fill in this gap, it is recommended to use as reference the Guidance on Interpretation of Annex I of the EU ETS Directive (excl. aviation activities). Installations covered by Annex I of the Industrial Emissions Directive (IPPC) should also be considered in the process, as many of those are subject to the ETS provisions as well. It should be decided which national legal act (regulating <i>air protection</i> or <i>industrial emissions</i>) will encompass the list of designated installations under Annex I of the ETS Directive.</p>
Regulation (EU) 601/2012 on monitoring and reporting of GHG emissions	<ul style="list-style-type: none"> Establishment of GHG emissions monitoring, reporting, verification and enforcement systems and public consultations procedures 	2026	<p>Approximation with the requirements of the Industrial Emissions Directive through a new legal act on industrial emissions is considered. This act should regulate permitting procedures, <i>self-monitoring and reporting requirements</i> for the installations, as well as <i>public participation in the decision-making process</i> by providing access to permit applications, permits and the monitoring results.</p>	<p>It is necessary to develop a concept for air monitoring (not limited to GHG only), which would clearly define the roles and responsibilities of the authorities with competences in this area; requirements for independent laboratories and their accreditation; as well as the principles of self-monitoring and control where applicable. It is recommended to enshrine this concept into an implementing regulation (e.g. on MRV), the legal basis for which to be established in the new Air Protection Law.</p>

EU Acquis	Commitments in CEPA Roadmap 2019	Dead-line	Progress achieved	Needs (gaps) identified & Recommended Action
Articles 5 and 12 of Regulation (EU) No 525/2013	<ul style="list-style-type: none"> Establishment of a national inventory system of greenhouse gas emissions relevant to climate change Establishment of a national system for policies, measures and projections 	2026	Basic NIR system is in place. As UNFCCC National Focal Point, the MoE coordinates the preparation of the GHG inventories, national communications and update reports of Armenia. They are submitted after approval by the interinstitutional Council on Climate Change. The procedure is regulated by Government Decree No 49 from 8 December 2016.	<p>Roles and responsibilities of different ministries and agencies related to GHG Inventory, NIR and NC preparation are not specified in any regulatory document.</p> <p>An implementing regulation or legally binding Guidelines should be developed, to define the obligations of institutions involved, data provision, timeline for GHG inventory preparation, QA/QC and timely submission.</p>

Table 5.2. Actions for approximation with the acquis related to ODS and F-gases

EU Acquis	Commitments in CEPA Roadmap 2019	Deadline	Progress achieved	Needs (gaps) identified & Recommended Action
CHAPTER 4: CLIMATE ACTION				
Article 54, point (j): OZONE DEPLETING SUBSTANCES				
Regulation No 1005/2009 on substances that deplete the ozone layer	<ul style="list-style-type: none"> Adoption of national legislation and designation of competent authority/ies Definition of the conditions for the production, placing on the market and use of controlled substances for exempted uses and individual derogations, including emergency uses of methyl bromide (Chapter III) Establishment of a licensing system for the import and export of controlled substances for exempted uses (Chapter IV) and reporting obligations for undertakings (Articles 26 and 27) Establishment of obligations to recover, recycle, reclaim and destruct used controlled substances (Article 22) Establishment of procedures for monitoring and inspecting leakages of controlled substances (Article 23) 	2024	<p>The Law on ozone depleting substances provides the framework regulating this area and designated the respective competent authorities. Amendments to the Law on ODS were adopted on 26 May 2020, changing the title to <i>Law on the protection of the ozone layer</i> and extending its scope to include HFCs.</p> <p>Electronic Licensing System on ODS has been developed, encompassing also F-gases. It will serve licensing, data collection and reporting.</p>	<p>The different phase-out commitments and timeframes for Armenia as Article 5 country should be reflected in the CEPA Roadmap (items 120-123). Need to provide for:</p> <ul style="list-style-type: none"> Procedures for <i>monitoring and inspecting leakages</i> as well as <i>reporting and data handling</i> of controlled substances; Regular trainings of competent authorities and companies’ personnel, as well as awareness raising campaigns related to implementation of the Montreal Protocol and the respective national legislation approximated with the EU acquis.

EU Acquis	Commitments in CEPA Roadmap 2019	Deadline	Progress achieved	Needs (gaps) identified & Recommended Action
Regulation No 517/2014 on fluorinated greenhouse gases (F-gases)	<ul style="list-style-type: none"> • Adoption of national legislation and designation of competent authority/ies • Ensuring a system for prevention of emissions (Article 3), establishing rules for leak checks in accordance with Article 4 and 5 and establishing a record keeping system in line with Article 6 • Ensuring that recovery is carried out according to the rules foreseen under Articles 8 and 9 • Establishment/adaptation of national training and certification requirements for relevant personnel and companies (Article 10) • Establishment of system for the labelling of products and equipment that contain, or whose functioning relies upon, fluorinated greenhouse gases (Article 12) • Establishment of reporting systems for acquiring emission data from the relevant sectors (Articles 19 and 20) • Establishment of enforcement system (Article 25) 	2024	<p>RA ratified the Kigali Amendment to the Montreal Protocol in March 2019.</p> <p>Consequent amendments to the Law on ODS, adopted in May 2020, extended its scope to cover F-gases.</p> <p>The respective list of HFCs was approved by Government Resolution No 1368-N/ 20.08.2020.</p>	<ul style="list-style-type: none"> • Given the recent amendments to the framework Law and adoption of the HFCs list, a road map is needed for approximating the specific provisions of the F-gas Regulation by developing respective implementing acts. • To that end, preliminary assessments should be carried out to determine the quantities of F-gases handled by companies involved in F-gas activities in Armenia, as well as the sectors covered by the EU Regulation. • In case of low level of activities, various options for reporting, labelling and certification could be considered in order to avoid administrative burden and disproportionally high cost (e.g. there is a possibility to meet certification requirements through recognition of certificates from EU Member States, or to apply less burdensome reporting requirements for SMEs, etc.).

Table 5.3. Actions for approximation with the acquis indirectly related to climate change (air quality and industrial emissions – only provisions relevant to climate change mitigation)

EU Acquis	Commitments in CEPA Roadmap 2019	Deadline	Progress achieved	Needs (gaps) identified & Recommended Action
CHAPTER 3: ENVIRONMENT				
(SELECTED ACQUIS RELEVANT TO THE CLIMATE CHANGE POLICY)				
Article 46, point (1b): AIR QUALITY				
Directive 2008/50/EC on ambient air quality and cleaner air for Europe (CAFE)	<ul style="list-style-type: none"> Development of a Law on protection of atmospheric air, establishing the framework for AQ protection Development of a Regulation establishing standards for normative and methodological assessment and classification of zones and agglomerations Development of a package of normative and methodological documents for assessing ambient air quality, determining the critical levels of pollution of ambient air and the threshold of critical load Design of the air quality monitoring network in line with the requirements of the CAFE Directive 	2024	<ul style="list-style-type: none"> Amended Law on the Protection of Atmospheric Air is meant to ensure transition to a new model of air quality and emissions control in Armenia. It is expected to provide the legal basis for several implementing acts, among which on an <i>integrated system for registration of harmful substances and GHG emissions</i> and on establishment of an <i>air quality monitoring network</i> in the Republic of Armenia. Targeted activities addressing these particular provisions are envisaged in the Action Plan for legal approximation in the air quality sector, developed within the EU funded project “<i>Assistance to RA Ministry of Justice in Legal Approximation in line with EU Standards</i>”. 	<p>Most relevant to climate action are the following provisions in the air quality area:</p> <ul style="list-style-type: none"> Establishment of an AQ <i>monitoring system</i> in line with the CAFE Directive; Development of methodological and guiding documents for AQ <i>assessment and determination of thresholds</i> for critical load. <i>Permitting requirements</i> for emissions discharge in the air. <p>The approximation activities proposed in the Action Plan for the AQ sector cover namely these CEPA provisions, with deadlines between 2022 and 2026 for development of the respective implementing acts.</p> <p>Regarding thresholds / limit values for substances – all required are set by the CAFE Directive in its Annexes II, XI, XII and by the 4th Daughter Directive in its Annexes I – to III. As suggested in the Action Plan, these</p>

EU Acquis	Commitments in CEPA Roadmap 2019	Deadline	Progress achieved	Needs (gaps) identified & Recommended Action
				<p>parameters should be copied into the Armenian legislation (<i>either as Annexes to new Law on Ambient Air or in additional by-law</i>).</p> <p>As for the AQ monitoring system – clear differentiation should be made between the provisions for monitoring of <i>pollutants’ concentration in the air</i> (regulated by CAFÉ) on the one hand, and monitoring of <i>compliance with emission permits</i> (regulated by the IED) on the other.</p> <p>With respect to permitting – it is more appropriated to regulate it by the national act(s) providing for <i>prevention and control of emissions</i>, rather than by a law regulating the protection of ambient air quality.</p>
Article 46, point (1f): INDUSTRIAL POLLUTION AND INDUSTRIAL HAZARDS				
Directive 2010/75/EU concerning industrial emissions (Article 14, points 3-6, Article 15, points 2-4; Annex I)	<ul style="list-style-type: none"> Establishment of criteria and mechanism for identification of installations requiring permit under Annex I of Directive 2010/75/EU Establishment of an integrated permitting system for installations with high level of emissions Implementation of best available techniques (BAT) 	2024	<ul style="list-style-type: none"> A new legal act has been considered for approximation with the IED, but decision on its scope and objectives is not taken yet. Support is requested for approximating the Industrial Emissions Directive under EU4Environment (Activity 3.1.1 “<i>Reforming regulatory regimes for large emission sources, including State Owned Enterprises</i>”), which could contribute in synergy to the 	<p>The following provisions of the IED are relevant to climate action:</p> <ul style="list-style-type: none"> Chapter III and Annex V <i>setting minimum requirements for pollutant emissions from LCPs</i>; Chapter II and Annex I <i>addressing integrated pollution prevention and control (IPPC) and BAT</i> for certain large industrial installations and activities; Annex IV providing for <i>public participation in the decision making</i>

EU Acquis	Commitments in CEPA Roadmap 2019	Deadline	Progress achieved	Needs (gaps) identified & Recommended Action
	taking into account BREFs and their national application by legislation and institutional framework		approximation process with the acquis covered by EU4Climate.	<p><i>process.</i></p> <p>All three set of provisions are needed for the approximation with the ETS Directive as well.</p> <p>According to the CEPA Roadmap, deadlines for approximation with the IED provisions (up to 2024) precede those for the ETS Directive (up to 2026). Therefore, addressing the IED requirements first would greatly contribute to approximation with the <i>climate acquis</i>, more specifically with the ETS Directive.</p>

6. Conclusions and Recommendations

For the three clusters of *acquis*, subject to the present gap analysis, the following **recommendations for further steps in the approximation process** are proposed to the Republic of Armenia.

To approximate Acquis implementing the UNFCCC/Paris Agreement

1. **Designation of installations and GHGs in the scope of the ETS Directive** (Annexes I and II), which will be included in the national MRV system. It is recommended the designation to be carried out on the basis of the Guidance on Interpretation of Annex I of the EU ETS Directive and in synergy with approximation process for the Industrial Emissions Directive (*see also point 15*).
2. Draft an **Implementing Regulation or legally binding Guidelines on Measurement Reporting and Verification (MRV Regulation/Guidelines)** defining the roles and responsibilities of different institutions involved in GHG Inventories, BURs and NCs preparation, data provision and handling, timelines, QA/QC procedures, and submission to UNFCCC. This work to be based on the MRV system gap analysis and recommendations developed within the EU4Climate.
3. Develop a **roadmap for capacity building** in line ministries and designated agencies in view of further developing and improving the national MRV system.
4. **Develop relevant training materials and carry out a series of trainings** targeting experts nominated by line ministries, the Statistical Committee and other designated agencies.
5. Develop and disseminate **training materials/guidance for the private sector stakeholders** on their contribution to the national UNFCCC reporting.

To approximate Acquis relating to ODS and F-gases

6. The different phase-out **commitments and timeframes for Armenia as Article 5 country** to be reflected in the CEPA Roadmap upon its update/revision (*items 120-123*).
7. Establish legally binding **procedures for monitoring and inspecting leakages** as well as **reporting and data handling** of controlled ODS.
8. Carry out **preliminary assessments to determine** the quantities of F-gases handled by companies involved in F-gas activities in Armenia, as well as the sectors covered by the EU Regulation (517/2014).
9. On this basis – **develop a roadmap for approximating** the specific provisions of the F-gas Regulation and **draft respective implementing acts** (establishing rules for leak checks; national training and certification requirements; system for labeling, reporting and data handling).
10. Design and carry out a **series of trainings for the competent authorities and companies’ personnel** with assigned responsibilities for implementation of the Montreal Protocol and the respective national legislation approximated with the EU *acquis* on ODS and F-gases.

To approximate Acquis indirectly relating to climate change (on air quality and industrial emissions)

11. Complete and **adopt the new Law on Ambient Air Protection** (on-going activity).
12. **Develop methodological and guiding documents** for AQ assessment and determination of thresholds for critical load, providing practical advice on the respective implementation measures required by CEPA (i.e. CAFE Art. 5, 6, 9, 26).

13. **Assess the current state and develop a concept for improving air quality monitoring** in Armenia, based on the requirements deriving from CEPA (approximation with the CAFE Directive 2008/50).
14. **Draft by-law/s (one or more Regulations) providing for rules and procedures** on air quality monitoring, data collection, measurement points, analysis, evaluation, etc.
15. **Revise the permitting requirements for emissions discharge in the air.** To that end, it is recommended to consider the relevant provisions in the **Industrial Emissions Directive (IED)** that are also relevant to climate action, more specifically:
 - minimum requirements for pollutant emissions from LCPs (Chapter III and Annex V);
 - addressing integrated pollution prevention and control (IPPC) and BAT for certain large industrial installations and activities (Chapter II and Annex I);
 - providing for public participation in the decision-making process (Annex IV).

These three set of provisions are **relevant to the approximation with the ETS Directive, as well as MRV requirements at installations level**. Since according to the CEPA Roadmap deadlines for approximation with the IED (up to 2024) precede those for the ETS Directive (up to 2026), it is strongly recommended to address the IED first. Such approach would greatly contribute to approximation with the climate acquis (both the ETS Directive and MRV regulations), while avoiding duplication of efforts.

Measures in the three acquis clusters are proposed for a three-year period (2021-2023), taking into account CEPA deadlines and priorities, as well as the current level of approximation assessed in the present report.

The proposals are intended **to guide the competent institutions on national level in prioritizing actions and agreeing on a roadmap for support by EU4Climate** (*within the duration of the project and depending on the availability of resources*), as well as other relevant programmes or projects supported by development partners and/or national funds.

7. Proposed Actions for Alignment with the Relevant EU Climate Acquis

Table 7.1 below **summarizes ten activities, proposed for consideration within the EU4Climate framework**. They have been chosen **out of fifteen actions**, presented in chapter 6 of this report. This is justified by the assumptions that support for Air Quality alignment actions within EU4Climate is agreed between Armenia, UNDP and EAA. **The actions proposed are subject to discussions** on national level and agreement with the EU4Climate Implementing Partner (UNDP). Once agreed, **they will be the basis for further alignment** with the climate acquis, pursuant to CEPA.

Table 7.1. Proposed activities for alignment with EU climate-related Acquis in the Republic of Armenia, to be supported within the EU4Climate regional initiative

No	Activity	2021				2022				2023			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
1	Designation of installations and GHGs in the scope of the ETS Directive , which will be included in the national MRV system at stationary sources level (taking into account the relevant provisions in the Industrial Emissions Directive /IED/).												
2	Completion and adoption of the new Law on Ambient Air Protection (to be decided if designated installations under activity 1 will be part of this Law as an annex, or subject to separate provisions!).												
3	Revision of the permitting requirements for emissions discharge in the air , considering the relevant provisions in the IED that are also relevant to climate action (<i>ELVs for the identified industries and particular stationary sources, permitting, inspection, compliance monitoring and public participation</i>).												
4	Development and adoption of legally binding provisions for implementing the national MRV system , defining the roles and responsibilities of different institutions involved in GHG Inventories, BURs and NCs preparation, data provision and handling, QA/QC procedures, and submission to UNFCCC.												
5	Preliminary assessments to determine the quantities of F-gases handled by companies involved in F-gas activities in Armenia, as well as the sectors covered by the EU Regulation (517/2014).												
6	Development of a roadmap for approximating the specific provisions of the F-gas Regulation and drafting respective implementing acts .												

		2021				2022				2023			
No	Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
7	Assess the current state and develop a concept for improving air quality monitoring in Armenia, based on the requirements deriving from CEPA (approximation with the CAFE Directive).												
8	Draft by-law/s (one or more Regulations) providing for rules and procedures on air quality monitoring, data collection, measurement points, analysis, evaluation, etc.												
9	Needs assessment and development of a roadmap for capacity building in line ministries and designated agencies, as well as private sector stakeholders, in view of further developing and improving the national MRV system.												
10	Development of relevant training materials and carrying out a series of trainings and capacity building actions for implementation of climate-related acquis, targeting experts from competent institutions, businesses and other relevant stakeholders (the scope would be subject to availability of resources).												