This document is an automatic machine translation to English and may not precisely depict facts or figures as they were intended in the original language.

ANNEX

Response to the European Commission's recommendations on Austria's NECP

Recommendation1: Better specification of GHG reduction measures in the ESR to meet -48 %, including flexibilities, timelines, including in the area of the Common Agricultural Policy

The Austrian updated NECP is already very detailed in terms of measures; the use of ETS flexibility was also clearly communicated. With regard to individual measures such as the reduction of counterproductive incentives and subsidies and CCS, further development is under way. However, this will take some time, as political decisions will have to be taken by the new federal government. However, there is a basic consensus on the main magnitudes of the planned impact of the measures.

CSR 2: Carbon capture estimation (CCS)

The amount of CO₂ that could be captured in 2030 is quantified at 500.000 tonnes in the NECP in Table 27 (eligible in the ESR). It is not yet possible to make more precise estimates. Further specification will be part of phase 2 of the Carbon Management Strategy, which focuses on planning and implementing concrete implementation steps.

Recommendation 3. Description of a detailed pathway towards the LULUCF target, including a better description of measures and public and private funding

All measures in the land use, land use change and forestry (LULUCF) sector have the overall objective of achieving the 2030 LULUCF target for Austria. The emissions balance in the LULUCF sector is highly volatile, due on the one hand to external natural environments such as drought, heat periods or storm events; on the other hand, due to constant improvements in data collection and reporting, there are many 'recalculations', which can have a massive impact on the whole time series, including the reference period. This makes a serious quantification of the impact of individual measures on the LULUCF inventory very difficult in many cases, so the LULUCF sector has only been modelled as a whole, as shown, for example, in the NECP document in Table 18 (WEM scenario).

A holistic approach has been taken when designing the content of the measures, with the aim of bringing together effective measures in the LULUCF sector from other related strategies, such as the Forest Strategy, the Biodiversity Strategy, the Bioeconomy Strategy or the Climate Change Adaptation Strategy. In the agricultural sector, measures from the common agricultural policy are particularly important and have therefore also been adopted as a framework for action in the NECP. In addition, renewable energy measures are also of key importance. These measures have been grouped thematically and prepared for the modelling of the LULUCF sector.

In order to obtain more specific emissions data for future policy making, other important projects are ongoing, such as the CareForNetZero project, which was also mentioned in the NECP. The aim of this project is to provide a detailed analysis of the impact of individual policy options on the LULUCF balance.

Recommendation 4 Climate change adaptation - making a clear link to EU objectives

The Austrian NECP frequently refers throughout the document to the Austrian Strategy for Adaptation to

Climate Change (NAS) and its Action Plan (NAP). The development and implementation of the NECP will be carried out in close coordination with the NAS. As highlighted in the NAS, there are direct links between adaptation to climate change and the Energy Union's target dimensions, in particular with regard to security of supply. In the NAS and NAP, these links are further elaborated in the chapters on construction and housing and on energy. In addition, the overall objectives of the Energy Recommendations in the NAP overlap with Energy Union objectives. As it is currently difficult to measure adaptation needs and policies quantitatively, these links are established in a qualitative way.

CSR 5 Renewable energy outlook for next 10 years or 2040. Indicative target for innovative renewable energy. Specific targets for buildings and industry or renewable fuels of non-biological origin (RFNBO) in the industrial sector by 2030. Indicative target for district heating and cooling by 2030. Sub-target for RFNBO in the transport sector

For the likely development of renewable energy technologies, reference is made to the technology development pathways presented in Table 8 of the NECP according to the WAM scenario. An outlook beyond 2030 (2040, 2050) on the evolution of the overall share of renewable energy under the WAM scenario, including a technological split in electricity generation, is included in Tables 30 and 31 of the NECP.

District heating:

The increase in the share of renewable energy sources in district heating and cooling is to be achieved by promoting the construction and connection of renewable district heating systems. As a further measure, support will also be given to the expansion or connection to existing district heating systems, which are currently partly based on fossil fuels, but only if a binding decarbonisation pathway (60 % decarbonisation by 2030, 80 % by 2035) is presented for this system.

With the entry into force of the Renewable Heating Act, in the case of a new district heating connection, only the connection to <u>quality-assured</u> district heating, coupled with a binding decarbonisation pathway, is permitted.

Buildings

A new Article 15a was introduced as part of the revision of Directive (EU) 2018/2001 by the new Directive (EU) 2023/2413. It requires Member States to increase the share of renewable energy in buildings by 2030. In Austria, the Federal Government is working intensively with the Länder to determine the national indicative value and take all necessary measures to increase the share of renewable energy in buildings.

An important step in this direction has already been taken by the Renewable Heating Act, which in new buildings only allows the installation of climate-friendly heating systems (renewable heating systems, connection to quality-assured district heating).

Extensive support is being granted by the Federal Government and the Länder for the conversion of existing fossil heating systems to climate-friendly heating systems and for the thermal renovation of buildings.

In addition to these subsidies, there are also tax reliefs for the installation of climate-friendly heating systems and thermal renovation measures.

RFNBO industry Rate:

The Austrian Hydrogen Strategy aims to increase the production of renewable hydrogen and to install electrolysers with an installed capacity of 1 GW by 2030. In addition to certain mobility applications, hydrogen produced will be used primarily in hard-to-decarbonise industries.

The requirements for the deployment of renewable hydrogen in the industry sector of the amendment to the EU Renewable Energy Directive (RED III, Article 22a) are currently being prepared for technical implementation.

In addition to the implementation of the hydrogen targets in industry, this concerns in particular the technical preparations for the introduction of a reporting and monitoring system to record the quantities of hydrogen used in industry, on the basis of which the Federal Government reports to the European Commission. The aim is to ensure that the reporting and reporting obligations for companies are sufficiently embedded in the national legal framework.

Recommendation 6 Detailed and quantified policies and measures to achieve the renewable targets (42.5 % and 45 % respectively at EU level). Speeding up permitting procedures. Role of renewable power purchase agreements (PPAs), self-consumption and renewable energy communities. Obligations on fuel suppliers; Measures for hydrogen supply/industry or H2 trade

The conclusion of Power Purchase Agreements (PPAs) is already possible under the current legal situation. These possibilities are also used in practice. The new Electricity Market Regulation and the planned Electricity Industry Act aim to further improve the framework conditions for the conclusion of PPAs. Austria is at the forefront of the roll-out of energy communities, with far more than 1000 energy communities already operating in Austria (see EAG monitoring report page 74 et seq.).

The licensing and planning-related articles of RED III are to be implemented into the national legal order via the Renewable Expansion Acceleration Act. However, the designation of acceleration areas (pursuant to Article 15c of RED III) is to be done on the basis of legal provisions of the Länder. The focus of the designation of acceleration areas is expected to be on photovoltaic and wind generation technologies, with the actual designation depending on various factors, such as the objectives of the Renewable Expansion Act, the local circumstances and the production profiles of the respective technologies.

The BMK plans to transpose the transport requirements of the RED III Directive into national law in the form of a multi-modal Fuel Act. The new Fuel Act is thus intended to replace and extend in full the Fuel Regulation currently in force. The aim is to reflect in any case the minimum transport targets of RED III in the Fuel Act. This approach is also modelled on the WAM 2024.

RNFBO in industry:

Implementation of RED III RFNBO target in industry, see answer recommendation 5

In addition to the ongoing work to implement the requirements for the deployment of renewable hydrogen in the industry sector (RED III, Article 22a), Austria has a number of support mechanisms in place to incentivise the production of renewable hydrogen as well as its use in industrial processes (Hystoffförderungsgesetz, Renewable Expansion Act, Environmental Promotion Act, Industry Transformation, IPCEI Hy2Use). Details can be found in the respective funding sections of the NECP.

Recommendation 7: Biomass supply, origin, imports – projection tractors. Domestic availability of biomass for energy purposes with LULUCF Regulation, sustainability criteria, etc. role of domestic biomethane application

On the interplay of bioenergy and the LULUCF target:

The NECP includes an evaluation of the framework conditions and objectives for the energy use of indigenous biomass. The BMK is currently preparing the basis for implementing the requirements of Articles 29 (7a) and (7b) of the Renewables Directive.

In Austria, biogas is predominantly used in combined heat and power plants to produce electricity and heat. This is due to the fact that for many years the government's support scheme exclusively supported electricity production with feed-in tariffs. For the expansion of biomethane production, regional approaches to the economic regeneration of biogas, the transformation and retrofitting of existing biogas plants to feed biomethane into the grid and the construction of new biogas plants to use unused biogenic waste and residues are considered as the main levers. Accordingly, in June 2024, the Federal Minister for Climate Action adopted a regulation granting investment subsidies for the conversion of existing biogas plants and the construction of new biomethane feed-in facilities amounting to EUR 40 million for that year. The first funding call was open until mid-November 2024. Additional calls are foreseen in the following years. In addition, the government's original target of producing 5 TWh of renewable gases in Austria by 2030 was increased to 7.5 TWh by 2030 by a decision of the Federal Government for a Renewable Gas Act. However, a legislative decision to that effect was no longer taken in the legislative period which had expired.

Recommendation 8: Transposition steps for Renewables Directive RED III (Directive (EU) 2018/2001 as amended)

The transposition provisions in question are currently being examined in detail. The BMK, in close cooperation with the Länder, is planning a wide range of transposition measures in the context of RED III. As part of this process, a new Electricity Industry Act (ElWG) is being drawn up. The amendment to the Environmental Impact Assessment Act in spring 2023 has already been implemented as a priority for the energy transition. Another lever for the energy transition is the Renewable Expansion Acceleration Act (EABG). The EABG shall inter alia:

Significantly accelerate permitting of renewable energy plants and hydrogen networks.

The provisions of Directive (EU) 2023/2413 are to be fully transposed at federal level by means of the Renewable Expansion Acceleration Act (EABG) and an amendment to the Environmental Impact Assessment Act 2000 (EIA-G) and the Water Law Act 1959 (WRG1959). To this end, the BMK has already initiated exchange formats.

Legislative preparations for the preparation of the Fuel Act are already in full swing. Depending on the current formation of the government, the draft is to be introduced in the political process in early 2025 and then in the parliamentary legislative process.

The Renewable Heat Act, adopted at the end of 2023, which only allows for the installation of climate-friendly heating systems in new buildings, is also an important part of the implementation.

Extensive support is granted by the Federal Government and the Länder for the conversion of existing fossil heating systems to climate-friendly heating systems and for the thermal renovation of buildings, as well as tax relief.

Recommendation 9: Complementing an energy efficiency target (final and primary energy) in line with EED III

The declared value for the primary energy consumption target is determined by the target for final energy consumption of 904 PJ multiplied by a factor of 1,2. The legislation is to be laid down with the implementation of EED III in the Energy Efficiency Act.

Recommendation 10: Obligation to renovate public buildings (areas) in terms of surface area or corresponding annual savings

Unlike EED II, the renovation obligations under Article 6 of the EED III relate to all local authorities, which has led to a significant increase in the area of buildings subject to renovation compared to the obligations under the previous EED II scheme. The vast majority of local and regional authorities have opted for the alternative approach. The Federal Government, the Länder and the municipalities are working on timely

transposition.

Recommendation 11: Represent cumulative energy savings; Baseline definition and saving rate

The average annual final energy consumption (based on Statistik <u>Austria's energy balance</u>) over the most recent three-year period prior to 1 January 2019 of 1 131 PJ is used as the basis for the calculation. The calculation corresponds to the methodology referred to in Article 8(1)(b) EEDIII without excluding energy used in transport or an option under paragraph 8. The exact amount of cumulative savings and savings rate will only be determined when EED III is transposed into national law.

Recommendation 12: More detailed description of energy efficiency/energy efficiency first policies and measures

Energy Efficiency First:

Under Section 38(5) of the Federal Energy Efficiency Act (EEffG), the Federal Government and the Länder must draw up a strategy by the end of 2024 at the latest to document the implementation of the principle of energy efficiency first (EE1st principle) in their respective areas of competence. This strategy must subsequently be updated and published every two years as part of the integrated NECP progress reports. This documentation is about to be finalised and will be made available online on the BMK's homepage by the end of the year. For more information, see also: <u>https://www.bmk.gv.at/themen/energie/effizienz/erste_stelle.html would be appreciated</u>.

In parallel, the BMK is currently preparing the implementation of Articles 3, 7 and 27 EED III in order to adapt the legal framework accordingly to the new requirements.

All efforts in the field of mobility outlined in the NECP are instrumental in increasing energy efficiency in line with the EE1st principle. By way of example, the high level of investment in public transport, including in particular electrified rail, active mobility or electrification of road vehicles, can be mentioned.

Energy audits and energy management systems:

Measures to promote energy audits and energy management systems focus on information and awarenessraising activities. In this context, the Climate Act partner network in particular plays an<u>important role</u> (<u>https://www.klimaaktiv.at/</u>).

Reference should also be made to the support programmes for energy audits and energy management systems. For example, the BMK promotes: Energy management systems in small and medium-sized enterprises (<u>SMEs, cf. https://www.bmk.gv.at/themen/klima_umwelt/energiewende/energieeffizienz/kmu_foerderung.</u> <u>html</u>). The regional programmes of the Länder, a support instrument of the Climate and Energy Fund, also help Austrian companies to set up operational environmental management systems through <u>consultations (see https://www.umweltfoerderung.at/mittelherkunft/regionalprogramme).</u>

Recommendation 13: Details on the creation of a highly energy efficient building stock (zeroemission buildings by 2050) including Milestones

The EPBD provides for the establishment of a building renovation plan that will include a renovation pathway for the objective of transforming the building stock into a zero-emission building stock by 2050 (with intermediate targets in 2030 and 2040). The preparation of this plan falls within the competence of the Länder. Work in this regard by the Länder is ongoing. Only the renovation path for buildings owned by the Federal Government is regulated by the Federal Government.

Recommendation 14: Further define how security of supply will be improved, including moving away from energy imports from Russia and other third countries; Steps to reduce fossil gas

The Austrian Federal Government has put in place numerous measures to ensure security of supply in the short term in the context of the energy crisis and to eliminate gas imports from Russia, as set out in the NECP.

This is reflected, inter alia, in numerous amendments to the Gaswirtschaftsgesetz (Strategic Gas Reserve, Storage Obligation). The Gas Diversification Act 2022 to reduce dependence on Russian natural gas provides EUR 100 million per year for gas diversification between 2022 and 2025. The law was recently extended until 2027.

Recently, an obligation for larger gas suppliers to draw up a security of supply policy (by 1 October 2024) has been introduced, to be notified to the regulator.

Due to numerous initiatives and laws related to the expansion of renewable energy, energy efficiency and energy saving measures, gas consumption has been significantly reduced (down 23 % in 2023 compared to the 2018-2022 average). In 2024, natural gas consumption is expected to be even lower (by 23.9.2024, natural gas consumption was minus 8.3 % compared to 2023).

The Austrian gas infrastructure is already well prepared for imports from alternative gas sources. In addition, the injection capacity from Italy was increased by 25 TWh/year to 95 TWh/year in October 2024. The feed-in capacity from Germany will also be increased by 25 TWh/year to 117 TWh/year by 2027 (the 'WAG Loop' project).

Austria has a new Austrian security strategy. It also addresses dependence on Russian natural gas as a risk. The phase-out of Russian gas is envisaged as part of an overall strategy to transform the energy system, in coordination with European initiatives on RePower EU. This will take into account decarbonisation, security of supply and affordability for households, industry and industry alike.

Recommendation 15: Strengthening the resilience of the energy system (climate change adaptation)

The NECP often refers to the Austrian Strategy for Adaptation to Climate Change (NAS) and its Action Plan (NAP). It addresses climate change challenges for the energy sector, such as cuts in electricity production in hydropower, as well as the heat-induced increase in electricity consumption. Similarly, the overall objectives of the recommendations for action in the field of energy are consistent with Energy Union objectives.

The Austrian Integrated Network Infrastructure Plan (ÖNIP) published in April, which identifies high-level infrastructure needs in the fields of electricity, methane and hydrogen, also refers to the NAS. ÖNIP also includes planning approaches to be taken into account by transmission system operators when planning their networks. One of these planning approaches highlights the need to take full account of the climatic changes caused by progressive climate change in the planning, construction and maintenance of transmission networks.

Recommendation 16: Assessment of oil infrastructure in the light of the shift away from fossil mineral oil

The modelling of scenarios for the NECP (WEM/WAM) did not make any explicit assumptions regarding the development of the oil infrastructure.

Recommendation 17: Energy demand response and storage; Improving the flexibility of the energy system in line with Article 20a of Directive (EU) 2018/2001

The main steps to improve the storage and flexibility of electrical energy will be implemented in the framework of the planned Electricity Industry Act (ElWG), on which political coordination will continue in the new legislative period, and have the following priorities:

<u>Flexibility platform</u>: The draft ElWG provides for a flexibility platform to integrate flexibility resources for system operators who can choose from different options to ensure cost efficiency.

<u>Demand Response</u>: Existing aggregation possibilities will be developed on both the generation and demand side and will have equal access to wholesale markets.

<u>Pilot projects</u>: As part of the emergency measures related to the energy price crisis, Austria has already gained experience with systematic demand response products in the form of the Electricity Consumption Reduction Act. This experience feeds into upcoming product designs, with companies already acting as active aggregators in the market today.

<u>Dynamic retail tariffs</u>: The new ElWG will standardise dynamic price options, as provided for in Directive (EU) 2019/944.

<u>Revised network charges</u>: The upcoming switch to peak-load-based tariffs supported by the roll-out of smart meters aims to promote "grid friendly" consumption behaviour.

<u>Flexible grid connection agreements</u>: Austria is considering flexible grid connection agreements, in particular for larger installations.

Recommendation 18: Addressing energy poverty - presentation of quantifiable targets

The Energy Poverty Definition Act (final) is in political negotiations and is intended to provide the legal basis for the statistical recording and monitoring of energy poverty. This law defines energy poverty and sets indicators to measure and quantify it, as well as criteria for supporting and identifying eligible households.

The 2023 Energy Efficiency Act established the Coordination Body for Combating Energy Poverty (KEA) as the central contact and competence centre for energy poverty in Austria. The MOSS is developing a data and monitoring plan on energy poverty to help develop a concrete, measurable reduction target.

The policy mix developed ranges from short-term measures to alleviate energy poverty (e.g. energy cost subsidies, Housing Energy programme) to ongoing ones.

Income support such as social assistance, housing benefits and energy advice to reduce energy consumption. It also focuses on long-term investments and subsidies to improve energy efficiency (e.g. energy advice, replacement of old inefficient appliances with new energy-efficient appliances, thermal renovation and switch to renewables). Support will be given to measures enabling energy poor households to improve their living conditions in terms of energy efficiency, energy consumption and renewable energy use themselves.

Recommendation 19: Better presentation of objectives under Objective 5 (research, innovation, competition)

The Austrian FTI Pact highlights national ambitions (e.g. circular economy, 100 % renewable electricity by 2030) and makes them a priority for research and innovation objectives. Cross-departmental priorities for research and innovation policy will become the basic principle of Austrian RTI policy. The aim is to achieve better alignment in implementation and avoid duplication. According to the Research Finance Act, the FTI Pact is the link between FTI strategy, funding agreements with research funding organisations and service level agreements with research and technology organisations and runs until 2026. The 2027-2029 Compact will be negotiated as of next year. It creates an inclusive element in the Austrian FTI landscape and provides a stable and reliable framework for RTI actors. Planning and reporting requirements have been aligned and reduced since the implementation of the Research Financing Act.

Through regular and ongoing monitoring and evaluation, the transformative tasks of RTI support will be further developed in an impact-driven manner. By pooling budgets and topics, the funding landscape in the field of RTI is made clearer.

The decarbonisation of industry, especially in hard-to-decarbonise sectors, will be addressed by an additional

support programme as of 2023. EUR 320 million will be available for RTI activities to decarbonise industry until 2027.

The circular economy is a cross-cutting issue, as is digitalisation and the issue of skills development.

Recommendation 20: Measures to mobilise private investment capital; Apportionment of investment needs between different sources of public funding (EU, national...) and private sources

Chapter 5.3 of the submitted Austrian NECP provides a very detailed compilation of existing information on investment needs and existing and planned financing mechanisms and provides comprehensive background information. In order to cope with the complexity and complexity of the issue, simplistic and generalised statements and aggregation of (non-comparable) needs were not required.

Different projects are currently being carried out at national level to assess investment needs.

The different existing public financing mechanisms are described in detail in the sub-chapter "Legally determined & budgeted funds" per sector and include a range of different mechanisms (see e.g. renewable electricity: EAEC Market Premiums, VAT deletion, subsidies).

For initiatives and measures to mobilise private capital in the financial market, reference is made to the Green Finance sub-chapter and the Green Finance Agenda.

A comprehensive analysis of the macroeconomic impact of the described measures and investments (based on an IO model) has also already been presented in Chapter 5.2.

Recommendation 21: Further statement on the reduction of climate counterproductive subsidies

As described in detail in section 3.1.3.4 of the NECP, the objective is to achieve a greenhouse gas reduction effect of at least 2 Mt CO2equivalent per year by the 2030 target year by phasing out counterproductive incentives and subsidies. The process of setting up the inter-ministerial working group ('WG counterproductive') has already been launched by the BMF. A more detailed assessment of the concrete implementation is not yet possible as it is not possible to prejudge the outcome of the working group. The aim of the working group is in any case to ensure that the subject is kept as data-based, objective and procedurally clean as possible. The first meeting of the WG is counterproductive in early 2025 (January/February 2025). Progress is published at

https://www.bmf.gv.at/themen/klimapolitik/green_Budgeting/kontraproduktive_maßnahmen.ht<u>ml</u>as part of the Climate and Environment Attachment to the Federal Estimates and HYPERLINK

"https://www.bmf.gv.at/themen/klimapolitik/green_Budgeting/kontraproduktive_ma%c3%9fnahmen.ht"<u>on the BMF's thematic website.</u>

Recommendation 22: Better articulate the employment and skills implications of the transition with a view to just transition; more elements for analytical basis for the preparation of the Social Climate Plan (CSP); The most vulnerable groups (e.g. ETS-2) and response measures, etc. How is consistency between NECP and CSF ensured?

As set out in Chapter 1.1.2 of the NECP, the 'Just Transition Action Plan: Education and training" defines labour market policies that promote future skills in the energy and heating sectors. The macroeconomic analysis in Chapter 5.2 already shows the effects of the planned measures on income distribution and the labour market. In doing so, particular attention shall be paid to households and businesses affected by energy poverty. In addition, in-depth scientific studies to study the impact of transformation will be carried out in national projects as described in the Action Plan. It presents regional and sectoral concerns and analyses

macroeconomic effects on employment and economic growth.

In drawing up the CSF, account should be taken, inter alia, of consistency with the measures and scenarios of the NECP.

Recommendation 23: Ensure broad public consultation. Better description of consultation fora and consideration in the NECP (draft and final)

A broad public consultation took place in summer 2023; more than 100 opinions have been received and have also been subject to a scientific evaluation. The comments were taken into account on an ad hoc basis in the NECP.

Recommendation 24: Improving regional cooperation with neighbouring countries, including by making use of existing cooperation fora; Establishment of a cooperation framework by 2 025 in accordance with Article 9 of Directive (EU) 2023/2413

Austria will continue to deepen cooperation in the future as well as on an ad hoc basis. This concerns both existing fora in which Austria actively participates (PENTA) and bilateral contacts, such as the development of wired infrastructure.

There is currently no update on solidarity agreements under the Gas SoS Regulation with the remaining neighbouringMember States. The Gas SoS Regulation has also been amended with effect from 1 January 2025 so as to remove the obligation to conclude bilateral agreements and instead introduce new standard rules on solidarity.