

Greening Action Plan 2021-2022

for

the European Union Agency for the Cooperation of Energy Regulators

Date: 07/06/2021

Contents

EXECUTIVE SUMMARY	3
DEFINITIONS AND ABBREVIATIONS	4
EXPLANATORY NOTE	5
IN RESPONSE TO THE COMMISSION'S ACTION PLAN TO BECOME CLIMATE NEUTRAL BY 2030	6
REFLECTION ON THE ACTION DOMAINS AS DEFINED BY THE EUROPEAN COMMISSION	6
AD#1: DESIGN SUSTAINABLE BUILDINGS AND WORKING SPACE	7
ACTION #1 Launching the procurement procedure for the rental of green and sustainable office procedure for the rental of green and sustainable office procedure for the rental of green and sustainable office procedure for the rental of green and sustainable office procedure for the rental of green and sustainable office procedure for the rental of green and sustainable office procedure for the rental of green and sustainable office procedure for the rental of green and sustainable office procedure for the rental of green and sustainable office procedure for the rental of green and sustainable office procedure for the rental of green and sustainable office procedure for the rental of green and sustainable of green and sustainable of green and sustainable of green and sustainable of green and green	
AD#2: OPTIMISE ENERGY CONSUMPTION AND SYSTEMS	10
ACTION #2 Installation of lights on sensors and other possible energy saving automations	13
ACTION #3 Installation of energy saving lightbulbs (such as LEDs)	14
ACTION #4 Training staff on the impact of individual actions for reducing carbon footprint (on how more carbon accountable)	
ACTION #5 Consider using more cloud resources and reduce the install-base needed in the Data C thus lowering the amount of power and cooling capacity	•
ACTION #6 Switch to an electricity provider that offers 100% share of RES	15
AD#3: RECONSIDER AIR TRAVEL AND PROMOTE LOW CARBON TRAVEL MODES	16
ACTION #7 Upgrading the telepresence and video conferencing capabilities	18
ACTION #8 Reconsider business travel for staffand for meeting participants	19
ACTION #9 Introduce carbon offset for necessary business travel	20
ACTION #10 Adopt a checklist for the organisation of sustainable meetings and events promoting attendance and low carbon organisatonal as pects	
AD#4: REDUCE COMMUTING EMISSIONS	21
AD#5: REDUCE PURCHASE AND CONSUMPTION GHG EMISSIONS	23
ACTION #11 Consider further digitalisation of administrative workflows, which would allow a truly paperless office where technically feasible (i.e. e-voting and e-signatory in ARES)	
ACTION #12 Consider removing private/local printers and introduce secure, centralized and energy printing services, by e.g. having staff use a personal pin to print on the shared printer	
ACTION #13 Include environmental aspects in the future tenders of the Agency	26
AD#6: MANAGE & COMMUNICATE	27
ACTION #14 Participation in and contribution to the Greening Network, attendance on meetings	28
ACTION #15 Public communication on the greening efforts of the Agency	28
ACTION #16 Sharing of good practices	29
ACTION #17 Annual competition of volunteers for a green change	29
THE AGENCY'S PATHWAY TO NET ZERO	30
Amazz	24

EXECUTIVE SUMMARY

The Agency prepared the Greening Action Plan 2021–2022 in response to the invitation of the Administrative Board and to the Agency's rising ambition to act as an example in tackling climate change. With this action plan the Agency identified 17 concrete action points which aim to reduce the Agency's carbon footprint in the course of 2021 and 2022. The document details the current state of play as well as the planned actions of the Agency factoring in the available resources.

The 17 action points are:

ACTION #1 LAUNCHING THE PROCUREMENT PROCEDURE FOR THE RENTAL OF GREEN AND SUSTAINABLE OFFICE PREMISES

ACTION #2 INSTALLATION OF LIGHTS ON SENSORS AND OTHER POSSIBLE ENERGY SAVING AUTOMATIONS

ACTION #3 INSTALLATION OF ENERGY SAVING LIGHTBULBS (SUCH AS LEDS)

ACTION #4 TRAINING STAFF ON THE IMPACT OF INDIVIDUAL ACTIONS FOR REDUCING CARBON FOOTPRINT (ON HOW TO BE MORE CARBON ACCOUNTABLE)

ACTION #5 CONSIDER USING MORE CLOUD RESOURCES AND REDUCE THE INSTALL-BASE NEEDED IN THE DATA CENTRE. THUS LOWERING THE AMOUNT OF POWER AND COOLING CAPACITY

ACTION #6 SWITCH TO AN ELECTRICITY PROVIDER THAT OFFERS 100% SHARE OF RES

ACTION #7 UPGRADING THE TELEPRESENCE AND VIDEO CONFERENCING CAPABILITIES

ACTION #8 RECONSIDER BUSINESS TRAVEL FOR STAFF AND FOR MEETING PARTICIPANTS

ACTION #9 INTRODUCE CARBON OFFSET FOR NECESSARY BUSINESS TRAVEL

ACTION #10 ADOPT A CHECKLIST FOR THE ORGANISATION OF SUSTAINABLE MEETINGS AND EVENTS PROMOTING REMOTE ATTENDANCE AND LOW CARBON ORGANISATONAL ASPECTS

ACTION #11 CONSIDER FURTHER DIGITALISATION OF ADMINISTRATIVE WORKFLOWS, WHICH WOULD ALLOW A TRULY PAPERLESS OFFICE WHERE TECHNICALLY FEASIBLE (I.E. E-VOTING AND E-SIGNATORY IN ARES)

ACTION #12 CONSIDER REMOVING PRIVATE/LOCAL PRINTERS AND INTRODUCE SECURE, CENTRALIZED AND ENERGY-SAVING PRINTING SERVICES, BY E.G. HAVING STAFF USE A PERSONAL PIN TO PRINT ON THE SHARED PRINTER

ACTION #13 INCLUDE ENVIRONMENTAL ASPECTS IN THE FUTURE TENDERS OF THE AGENCY

ACTION #14 PARTICIPATION IN AND CONTRIBUTION TO THE GREENING NETWORK, ATTENDANCE ON MEETINGS

ACTION #15 PUBLIC COMMUNICATION ON THE GREENING EFFORTS OF THE AGENCY

ACTION #16 SHARING OF GOOD PRACTICES

ACTION #17 ANNUAL COMPETITION OF VOLUNTEERS FOR A GREEN CHANGE

The Greening Action Plan 2021-2022 is the Agency's first step to its climate neutrality.

DEFINITIONS AND ABBREVIATIONS

The Agency European Union Agency for the Cooperation of Energy Regulators

Greening Ambassadors A selection of volunteers nominated as Greening Ambassadors of

the Agency in 2018 to promote greening efforts at the Agency

Greening Network Initiative connecting the European Union agencies related to the

topic of greening

AB Administrative Board

ΑO **Authorising Officer**

ASHRAE American Society of Heating, Refrigerating and Air-Conditioning

Engineers

BoR **Board of Regulators**

CO2 Carbon dioxide

CO2e Carbon dioxide emissions

EC **European Commission**

GHG Greenhouse gas

MiPS Missions Processing System

NIJZ National Institute of Public Health of Slovenia

NRAs National Regulatory Authorities

PMO Paymaster Office

REHVA Federation of European Heating, Ventilation and Air Conditioning

Associations

RES Renewable energy sources

EXPLANATORY NOTE

The present document is an action plan for the years 2021-2022 aimed at improving the carbon footprint of the Agency. It was prepared in response to the invitation of the AB and to the Agency's rising ambition to act as an example in tackling climate change. The present document aims to provide the foundations for the Agency's efforts towards climate neutrality.

This action plan is the result of three months of internal consultations and drafting, coordinated by the Head of Corporate Services and the Facility Management Team of the Agency.

- The first ideas for action points were consulted with the representatives of the Information Resources Management and Security Team, the Strategy Delivery and Communications Team, and the Budget, Finance and Procurement Team.
- The first ideas for action points were further tailored based on the interactions with the Greening Network.
- The action plan was aligned to the latest efforts of the European Commission.
- The action plan was consulted with the Greening Ambassadors of the Agency.
- The action plan was consulted with the Senior Management of the Agency.

Since the Agency has just started its journey to become climate conscious, the present document relies on the grounding documents of the European Commission. In this respect, the European Commission's Feasibility and Scoping Study for the Commission to Become Climate Neutral by 20301 concluded in September 2020 was carefully reviewed and relied on in establishing the structure of this document.

As such, the Agency's actions are presented under six thematic categories (in line with the Commissions categorisation), while under each category, the state-of-play, the relevant considerations, the Commission's mitigating measures and the relevance of these measures for the Agency are detailed.

Under each category, the associated action points for 2021-2022 are listed including the defined indicators of achievement per action.

The action points are also summarised in a complementary excel document displaying an indicative timeline on the expected delivery times.

¹ FEASIBILITY AND SCOPING STUDY FOR THE COMMISSION TO BECOME CLIMATE NEUTRAL BY 2030 (europa.eu)

IN RESPONSE TO THE COMMISSION'S ACTION PLAN TO BECOME CLIMATE NEUTRAL BY 2030

In the context of the European Green Deal, the EU long-term strategy to become the world's first climate neutral continent by 2050, the European Commission concluded in September 2020 a Feasibility and Scoping Study for the Commission to Become Climate Neutral by 2030.

The Agency is following the ambitions of the European Commission to become climate neutral by 2030, aiming to align its greening efforts to the extent possible and based on the available resources. To that end, for the years 2021 and 2022 the Agency is committing to similar actions, but with a narrower scope. Nevertheless, the Agency foresees to commit to climate neutrality, and possibly achieve it already by 2030, given sufficient resources become available. In order to support such a transition and to ensure that concerted efforts are applied, the Agency reflected on the greening action domains defined by the Commission and prepared the Agency's Greening Action Plan 2021-2022, as presented below.

REFLECTION ON THE ACTION DOMAINS AS DEFINED BY THE **EUROPEAN COMMISSION**

The Feasibility and Scoping Study for the Commission to Become Climate Neutral by 2030 identifies six (6) action domains (AD) based on the Commission's GHG scoping and identification of the main sources of emissions. Under the six AD, the required actions are categorised into forty-five (45) mitigation measures, relevant for the Commission.

The listed measures serve as a valuable resource for the Agency's efforts to draw from, recognising that they were uniquely designed for the Commission to avoid or reduce the GHG emissions. Nonetheless, relying on this already established classification allows an orderly display of the Agency's planned actions, while also recognising the Agency's current challenges and/or limitations.

Therefore, the Greening Action Plan 2021-2022 of the Agency and the available means are explored within the following six domains, in line with the ones of the European Commission:

AD#1 Design sustainable buildings and working space;

AD#2 Optimise energy consumption and systems for buildings;

AD#3 Reconsider air travel and promote low carbon travel modes;

AD#4 Reduce commuting emissions for transport and mobility;

AD#5 Reduce GHG emissions from purchase and consumption;

AD#6 Manage and communicate for other sources of emissions.

AD#1: DESIGN SUSTAINABLE BUILDINGS AND WORKING SPACE

State-of-play

The Agency is renting its office premises under a fixed length rental contract, which expires at the end of January 2024. The preparations to launch the new procurement procedure for the rental of office premises will already start at the end of 2021.

The current premises, the "TR3" building is under the protection of Cultural Heritage of Slovenia.

It is important to clarify that regardless of the contractual dependencies implied by the current building contract, the premises already excel in certain aspects:

- The building was built in 1974 with high quality, sustainable building materials of that era, asbestos free:
- Due to its unique triangular prism shape and large windows, it operates with a high amount of natural sunlight, thus reducing the energy consumption for lightening.

The current premises are suitable for up to 159 staff members, including temporary agents, contract agents, seconded national experts, interim staff and trainees, as well intra-muros consultants working at the Agency premises. At the moment, the Agency has 132 staff members, including temporary agents, contract agents, seconded national experts, interim staff and trainees.

Considerations

Since the current rental contract of the Agency is binding, the scope of the Greening Action Plan 2021-2022 in this domain is limited.

A careful consideration should be given to the costs and benefits of any efforts carried out on the current premises, with special attention to the possibility that the fruits of such efforts may be only available for a short term. The Agency is beginning the preparations for the new procurement procedure for the rental of office premises in Q4 2021. In this process, the Agency will identify its course of action for optimisation of office space (also in respect of the new normal after the COVID-19 pandemic). There is not an absolute intention to change the current building, however the new tender procedure will identify the minimum criteria which would assure the Agency is located in a green and sustainable building (whether through negotiations with the current landlord or via relocation).

As the Agency does not own its premises² (and it is not foreseen for the future that the Agency will own its premises), certain dependencies will continue to define the scope the Agency's actions.

There are five (5) mitigation measures identified under this AD for the Commission. The planned action points for the Agency under each of these mitigation measures are presented below.

² 25% of the Commission's buildings are owned by the institution

Commission's mitigating measures Relevance of the measures for the Agency

1.1 Optimise office space

Reduction of average office building gross surface per employee by improving work effectiveness with various workspaces, and introducing a work-in-shifts model

Office space optimisation with regards to the reduction of the rental area is limited under the current rental contract.

Small-scale efforts regarding the introduction of collaborative spaces will not contribute to a considerable reduction of the carbon footprint of the Agency. Furthermore, the works necessary for redesigning the current office space might further increase the Agency's carbon footprint. Such efforts, regarding creative and collaborative office spaces are discussed outside the scope of the Greening Action Plan 2021-2022 with a focus on facilitating the work of the Agency under the "new normal" of a post-pandemic situation.

Should the Agency's staff exceed the available working places, smart optimisation of the office space is going to be a priority, rather than renting further office premises.

1.2 Improve meeting room occupancy

Optimising the use of meeting and shared rooms by increasing and varying meeting facilities; improving space management and energy consumption with the support of digital booking

In order to improve the occupancy of the meeting rooms, these meeting rooms should be redesigned to meet the (new) needs of the Agency. The Agency is looking into the possibility of improving its booking systems under the scope of defining the "new normal" for the Agency. This is planned to be implemented in the next Greening Action Plan as of 2023.

Attention will be paid to this being a manageable investment as the current rental contract expires in few years. The current exceptional teleworking mode and the unforeseen extensions of such circumstances should also be noted.

The Agency already operates using an online booking system for its meeting rooms, which allows colleagues to check and book meeting premises via Microsoft Outlook. Given sufficient resources become available, the Agency will look into the possibility of installing digital booking plates and booking system, which would allow better and appropriate booking and on-spot control of the booking of meeting rooms and its equipment.

1.3 Use low-carbon materials in construction and renovation

Renovation with of low-carbon and sustainably sourced biomaterials

The building was built with high quality, sustainable building materials known at the time of its construction and by being protected under Cultural Heritage of Slovenia, to our understanding, is regularly maintained while all relevant standards are being kept.

Due to the contractual dependencies under the current rental contract, the Agency is dependent on the landlord to perform any renovation. Therefore, the Agency has very limited direct influence on the use of low-carbon materials in renovations or reconstructions.

1.4 Increase vegetation in the built environment

Developing green spaces by increasing plantation of trees, green roofs Any permanent plantations in or at the current premises (such as trees, green roofs) is outside the influence of the Agency, but this aspect might be part of the tender specifications for the new procurement procedure for the office space.

1.5 Relocate to green and sustainable buildings

Negotiating the terms or relocating to a green and sustainable building with high environmental quality The current rental contract is binding the Agency until 31 January 2024. The procurement procedure for the rental of office premises will be initiated at the end of 2021. The new tender specifications will be drafted in line with the Commissions guidance³, and will also take into account the greening efforts of the Agency. In order to assure the best results, the Agency intends to reach out to the Greening Network for template tender specifications, and possibly to the Interinstitutional Green Public Procurement (GPP) Helpdesk.

Based on the considerations and mitigating measure specified above, the Agency is committing to the following actions for the years 2021 and 2022, taking into account the available resources:

ACTION #1 LAUNCHING THE PROCUREMENT PROCEDURE FOR THE RENTAL OF GREEN AND SUSTAINABLE OFFICE PREMISES

Within the constraints of the new procurement procedure for the rental of office premises, the Agency commits to prepare:

- a detailed assessment for office space optimisation in order to reduce the gross office building surface needed;
- tender specifications in line with the Commission's guidance and assuring the rental of green and sustainable office premises.

The impact of the Action is significant – not in terms only of the Greening Action Plan 2021-2022, but with regards to the long-term greening efforts of the Agency. The new rental contract starting from February 2024 may bind the Agency in some areas, which are important for becoming climate neutral.

Indicators of achievement:	#1.1	Adopted office space reduction plan improving work effectiveness in line with the Agency's new ways of working
	#1.2	Tender specifications drafted in line with Commission's guidance and assuring the rental of green and sustainable office premises
	#1.3	Concluded and successful negotiations for green and sustainable office premises

³ https://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm

AD#2: OPTIMISE ENERGY CONSUMPTION AND SYSTEMS

State-of-play

The providers for electricity, heating, water and waste management for the current premises are managed by the landlord and the services are provided to the Agency under the current rental contract. As the Agency does not own its premises, it is dependent on the decisions of the landlord to invest in the optimisation of energy consumption at the building.

Considerations

Even though the Agency does not have a direct influence on the decisions of the landlord, the greening efforts of the Agency of 2020 show that negotiations can be successful. As such, from 2021 onwards, the electricity provided to the Agency is coming 100% from only RES4.

The Commission has twelve (12) different mitigation measures identified under this domain. The planned action points for the Agency under each of these mitigation measures are presented below.

Commission's mitigating measures Relevance of the measures for the Agency

2.1 Close offices during holiday periods

Closing of the building or floors when low occupancy rates are expected As a tenant, the Agency is sharing the premises with other institutions. Therefore, the closing during holiday periods or at low occupancy rates, or isolating office premises is decided by the landlord. The building's heating/cooling system is centralised, and for management and security reasons cannot be turned off, while electricity and water consumption is already limited due to the low occupancy rates. The electricity consumption is further regulated by the in-house switch-off policy, where staff is trained and asked to switch off appliances to the extent possible.

2.2 Optimise energy regulation systems

Improving the regulation of all building systems, such as ventilation, temperature or light, by using sensors and automatic features

The Agency is in negotiations with the landlord regarding the implementation of automatic switches (under its greening efforts, as well as for improving the health and safety of staff). The implementation of automations is dependent of the availability of financial and human resources.

Furthermore, the Agency is also leading negotiations with the landlord for the installation of energy saving lightbulbs, which requires the replacement of the entire lightning system on the Agency's premises. The installation of energy saving lightbulbs is dependent of the availability of financial and human resources.

2.3 Improve building insulation and passive protection

Improvement of insulation (walls, roofs, windows) and passive protection (sun blockers)

The Agency is discussing these aspects with the landlord, however, the final decision is with the owner of the building and further limited by the existing legislation for the protection of cultural heritage.

⁴ See Annex I. Report on the use of energy deriving from renewable energy sources in Slovenia and the negotiations with the proprietor on the use of 100% green electricity on the premises at the European Union Agency for the Cooperation of Energy Regulators

2.4 Communicate on energy consumption and behaviours

Supporting the effectiveness of the technical solutions by raising awareness and training staff

The Agency is aiming at training its staff on the impact of individual actions for the reduction of carbon footprint (such as switching off computers and screens when leaving the office). The efforts under this domain will remain low-cost, and aim at utilising the Agency's connections and internal support system. As such, for the years 2021 and 2022, the Agency aims to create a knowledgebase with necessary information on how to reduce carbon footprint on an individual level.

2.5 Conduct internal energy audits

Improving the monitoring of building energy efficiency and the management of renovations by running audits

The landlord measures electricity consumption per floor and the thermal energy at the entrance of the building. Internally, the landlord performs control audits of consumption with respect to average and peak heat energy consumption in an individual month, depending on the average outdoor temperatures. At the time of the COVID-19 pandemic, measurements are recorded, but the efficiency is not analysed, as the devices operate primarily according to the recommendations of REHVA, ASHRAE and NIJZ, and not according to energy efficiency concerns.

Due to lack of available human resources, internal energy audits performed by the Agency are not foreseen for the years 2021 and 2022.

2.6 Optimise energy systems at replacement time

Reaching higher energy performance by downsizing heating/cooling equipment, improving the energy performance of the equipment, rehabilitating the infrastructure The Agency is looking into these aspects with the landlord, however, the final decision is with the owner of the building in terms of timing and resources.

2.7 Install on-site renewable energy production for heating/cooling

Developing on-side renewable energy production for heating/cooling purposes The Agency is looking into these aspects with the landlord, however, the final decision is with the owner of the building in terms of timing and resources.

2.8 Install on-site PV production

Developing on-site renewable energy production for electricity needs The Agency is looking into these aspects with the landlord, however, the final decision is with the owner of the building in terms of timing and resources.

2.9 Use cloud computing services

Reduction of energy consumption for data centre management by using cloud computing and lowering maintenance needs

Currently, all data is processed and stored in our data centre on-site. Especially email and file storage consumes a lot of processing power and storage capacity which in turn results in strong requirements towards provided power and cooling capacity in the data centre. As a data centre never works at its full capacity, and cooling is adapted to the maximum capacity, alternatives in terms of efficiency must be found: using cloud resources (both Software as a Service or Infrastructure as Service) could significantly reduce the processing and storage capacity requirements and thus the power and cooling requirements in the data centre. Thus, IT will look in 2021 to increase the efficiency by moving to cloud services (e.g. Microsoft 365 for Email, Storage and Web-based conferencing) but also will look into options to de-localize certain non-sensitive services (e.g. development & test environment in the cloud). This reduces the required computing power and storage capacity in the data centre (1/3 reduction envisioned in 2021, 1/2 reduction envisioned over the next 5 years). Indeed, this impact is costly and will require a careful evaluation on the use of the resources. However, using the cloud comes with new challenges regarding security and data protection risks: in particular, definition of rules for the handling of sensitive information stored in the cloud, may have an impact on the procurement and the implementation timeline of such services, and may require hybrid solutions.

2.10 Use new fuel sources for heating

Procuring improved environmental fuel sources for heating

The heat carrier on the Agency's premises is a chemically prepared hot water system. Since the building and its surroundings are a cultural monument of national importance, there are no certificates and efficiency standards that need to be acquired for the building. Consumption statistics will be collected as of January 2021 so that the Agency can gain a better understanding on the environmental impact of its office premises.

The Agency is looking into these aspects with the landlord, however, the final decision is with the owner of the building in terms of timing and resources.

2.11 Purchase green electricity for all sites

Purchasing green electricity either with certificates of origin or with power purchase agreement

The Agency has successfully concluded negotiations with the landlord in 2020, and as such, the Agency is provided by electricity from only RES. At the end of each calendar year, the electricity provider will provide a certificate of origin i.e. a certificate with which they will demonstrate the purchase of green energy.

2.12 Switch to heat pumps

Replacing fossil fuel sources for heating/cooling systems with heat pumps The Agency is looking into these aspects with the landlord, however, the final decision is with the owner of the building in terms of timing and resources.

Based on the considerations and mitigating measure specified above the Agency is committing to the following actions for the years 2021 and 2022, taking into account the available resources:

ACTION #2 INSTALLATION OF LIGHTS ON SENSORS AND OTHER POSSIBLE ENERGY SAVING **AUTOMATIONS**

The Agency is leading negotiations with the landlord regarding the implementation of automatic switches (under its greening efforts, as well as for improving the health and safety of staff). Implementation of automations is dependent on the availability of resources.

Due to the current set-up of the Agency's premises, such efforts require significant investment in respect of fitting-out the premises to meet the requirements of the new devices.

Indicators of achievement:	#2.1	Price estimation provided by the landlord
	#2.2	In case there is budget available, adopted plan for fitting-out works
	#2.3	Work-orders and delivery notes
	#2.4	Monthly consumption reports provided by the landlord for statistical purposes for data comparison

ACTION#3 INSTALLATION OF ENERGY SAVING LIGHTBULBS (SUCH AS LEDS)

The Agency is leading negotiations with the landlord regarding the installation of energy saving lightbulbs. Since the current light-sockets do not support such solutions, the complete lightning system should be replaced on the premises.

The installation of energy saving lightbulbs is dependent on the availability of resources.

Due to the current set-up of the Agency's premises, such efforts require significant investment in respect of fitting-out the premises to meet the requirements of the new devices.

Indicators of achievement:	#3.1	Price estimation provided by the landlord
	#3.2	In case there is budget available, adopted plan for fitting-out works
	#3.3	Work-orders and delivery notes
	#3.4	Monthly consumption reports provided by the landlord for statistical purposes for data comparison

ACTION #4 TRAINING STAFF ON THE IMPACT OF INDIVIDUAL ACTIONS FOR REDUCING CARBON FOOTPRINT (ON HOW TO BE MORE CARBON ACCOUNTABLE)

The Agency is intending to provide learning opportunities for its staff members with regards to educating themselves on the individual actions for reducing their carbon footprint. The Agency intends to reach out to the European Environmental Agency (EEA) and request for available resources to be shared (lectures, studies, training materials, etc.) EEA is chairing the EU Agencies Network in 2021-2022 and sustainability is one of the objectives on its Action Plan for this chairmanship.

EU Learn platform of the EC will be also explored for available and suitable resources.

Indicators of	#4.1	Intranet page created with the available resources
achievement:	#4.2	Provide "learn & lunch" session to staff, guiding through the available resources

ACTION #5

CONSIDER USING MORE CLOUD RESOURCES AND REDUCE THE INSTALL-BASE NEEDED IN THE DATA CENTRE, THUS LOWERING THE AMOUNT OF POWER AND **COOLING CAPACITY**

The Agency is intending to migrate significant services to the cloud and thus reduce required on-premises power and cooling capacity. The Agency intends to use CLOUD II Framework Contract and potentially share cloud resources with other EUIs ("Community Cloud").

Indicators of achievement:	#5.1	Using Microsoft 365 as "Software as a Service" migrating Email Storage, File Storage and Web-based conferencing to the cloud
	#5.2	Migrate 50% of the core services (development & test environment, web site) to the cloud

ACTION#6 SWITCH TO AN ELECTRICITY PROVIDER THAT OFFERS 100% SHARE OF RES

While the Agency has already successfully negotiated with the landlord to have 100% share of RES in the electricity provided to the Agency, 2021 will be the first year this will take effect. As such, the Agency intends to monitor its consumption, as well as verify the validity of the sources of the purchased electricity.

The Agency expects a minimum of 10% increase of electricity costs due to the higher cost of green energy in general in Slovenia.

Indicators of achievement:	#6.1	Monthly consumption reports provided by the landlord for statistical purposes for data comparison shared on the Agency's intranet with quarterly updates
	#6.2	The certificate of origin demonstrating the purchase of green energy

AD#3: RECONSIDER AIR TRAVEL AND PROMOTE LOW CARBON TRAVEL MODES

State-of-play

The Agency organises, on average, 450 missions per year for staff. This number has significantly dropped due to the COVID-19 pandemic, and pushed the Agency to further develop its IT infrastructure to support a better online collaboration experience. The circumstances imposed by the pandemic will further incentivise the Agency to improve its videoconferencing facilities, while the definition of the "new normal" for the Agency will also help to better tailor its greening efforts.

Given the location of the Agency, staff and the guest of the Agency are at a general disadvantage due to the lack of air travel options and limited train connections. Staff is often forced to take a stopover, which significantly affects the associated carbon emissions related to missions.

Furthermore, the Agency organises various regular meetings and events, where the highest rate of the associated carbon emissions are related to the travel of participants (such meetings with National Regulatory Authorities, AB, Board of Regulators, Work Groups etc.) The current pandemic has initiated the shift towards virtual-only meetings, which is expected to have an impact on the ways the Agency organises meetings in the post pandemic era.

While the shift towards virtual-only meetings is expected to affect also staff missions, careful considerations will be given to also where the missions are most useful and impactful in respect to the Agency's outreach.

Considerations

The Commission's ambitions for reducing the carbon footprint related to missions are mostly pioneering, while the Agency is only considering the legal or technological basis to implement such measures at the moment. The efforts for 2021 and 2022 regarding improving the carbon footprint of the Agency related to missions will have to aim at mapping the available solutions.

The Commission has seven (7) different mitigation measures identified under this domain. The planned action points for the Agency under each of these mitigation measures are presented below.

Commission's mitigating measures Relevance of the measures for the Agency

3.1 Develop remote meeting attendance for staff through enhanced videoconference facilities

Supporting the use of videoconferencing for remote meetings by installing new and improving existing facilities

Efforts under this mitigation measure were implemented and are being implemented due to the current teleworking mode under the COVID-19 pandemic. The Agency is looking into the possibility to further improve its videoconference capabilities & facilities also under the scope of defining the "new normal" for the Agency. A new tool is currently piloted and gradually rolled-out in 2021.

3.2 Implement a bonus/malus fee in mission booking process

The Agency will be looking into this option in its next Action Plan as of 2023.

Developing a ticket-pricing process in the booking tool based on carbon emissions and productive time

3.3 Implement carbon threshold on missions

Implementing carbon thresholds for missions to challenge the use of travel modes by assessing the feasibility of carbon accounting in booking and reporting tools and defining an annual budget for compensations

For EC Staff only, PMO has developed a new feature in MiPS to calculate the CO2 footprint. The feature is currently tested by PMO also for the use of the Agency, and as such the following information per mission is expected to become available also for the consideration of the AO of the Agency:

- Mission duration;
- Travelling time;
- Distance;
- Number of transports;
- Calculated carbon footprint in kg of CO2e;
- Calculated carbon footprint in kg of CO2e per transport.

No other EC tool is available to help to calculate CO2 emissions per business travel and/or provide a useful indicator. Some airlines provide the estimated CO2 emissions when booking a flight with the option to compensate them. The price to compensate 100 Kg CO2 in 20 years is EUR 2⁵. Considering the average of 450 missions/year, the cost of at least EUR 2000/year should be estimated.

The European Commission's carbon footprint is calculated in accordance with the Bilan Carbone® Methodology (developed by the French environment agency ADEME) and the GHG Protocol (developed by the World Resources Institute and the World Business Council for Sustainable Development). Both methodologies are in line with the ISO 14064 Standard on GHG validation and verification. The Agency will attempt to find a resource/solution that allows the calculation of carbon emissions per mission in line with the Commission's calculations, assuring that any legal obligations are met and given that sufficient resources are available.

3.4 Improve booking criteria for missions

The Agency will be looking into this option in its next Action Plan as of 2023.

Improving the manner in which information about travel alternatives is displayed during the booking process by integrating productive work time, displaying travel emissions alternatives, intermodal alternatives to connection flights, or complementary criteria on flight efficiency

⁵ Compensaid https://lufthansa.compensaid.com/,

3.5 Develop remote meeting attendance and promote low carbon travel for visitors

Providing remote meeting solutions and thus avoiding travel emissions, improving event organisation process to reduce travel emissions

Efforts under this mitigation measure were implemented and are being implemented due to the current teleworking mode under the COVID-19 pandemic (see also mitigation measure 3.1), while the current pandemic has also initiated the shift towards virtual-only meetings. In its attempt to continue to promote virtual-only meetings, and in order to monitor the number of meetings and their settings, the Agency is working to adopt a checklist for organising meetings and events. The checklist would incentivise the organisers to address organisational aspects of events that would allow for lower carbon emissions - such as the need for a physical event, possibilities for a partial/complete virtual event, participant's travel. Parts of this effort will also aid the Agency's efforts for reducing its purchases and consumption (see AD#5).

3.6 Implement mandatory train transport up to a set distance

Implementing new and binding rules for preferring train travel based on distance or route conditions

The limited infrastructure for transportation by train at the headquarters of the Agency poses limitations in the possible implementation of such a measure.

3.7 Implement priority rules for the purchase of flight economy class tickets

This is already implemented by the Agency within its current mission rules.

Implement new and binding rules for the use of business flights

Based on the considerations and mitigating measure specified above, the Agency is committing to the following actions for the years 2021 and 2022, taking into account the available resources:

ACTION#7 UPGRADING THE TELEPRESENCE AND VIDEO CONFERENCING CAPABILITIES

The Agency aims at improving its capabilities and facilities for telepresence and video conferencing. On one hand, we try to use cloud-based solutions to reduce the carbon emissions in the data centre; on the other hand, this will allow staff to participate in virtual conferences either from remote locations or from on premises meeting rooms.

Indicators of achievement:	#7.1	Staff is fully migrated to cloud-based video conferencing and telepresence solutions
	#7.2	Meeting room equipped with proper hardware to allow seamless use of cloud-based video conferencing and telepresence solutions

ACTION #8 RECONSIDER BUSINESS TRAVEL FOR STAFF AND FOR MEETING PARTICIPANTS

The Agency aims at improving its criteria for business travel, and as such looks into the possibility of introducing the calculation of carbon emissions, introduction of thresholds or selection criteria in the booking phase of missions to allow a conscious choice. The Agency will also look into the most appropriate ways to five visibility to this effort. The lack of

- available air-travel options;
- alternative, on-land (such as train) connections;
- legal basis; and
- human and financial resources

may pose challenges in the implementation of such efforts.

Indicators of achievement:	#8.1	Identified reliable source for the calculation of estimated CO2 emissions per business travel in line with the carbon footprint calculation method
	#8.2	Adopted policy on the introduction of thresholds / selection criteria of CO2 emissions for business travel
	#8.3	Raised the issues the Agency is facing regarding travel connections formally with the Slovene government
	#8.4	Explored possibilities of the Agency's to support alternative travel options (car-sharing, carpooling, etc.)
	#8.5	Publication of the carbon footprint measurements on the Agency's intranet or other public spaces of the Agency

ACTION#9 INTRODUCE CARBON OFFSET FOR NECESSARY BUSINESS TRAVEL

The Agency aims at improving its criteria for business travel, and as such, looks into the possibility of introducing carbon offset payments. The lack of legal basis and human and financial resources may pose challenges in the implementation of such efforts.

The staff could be sensitised to such an initiative without involving financial efforts of the Agency, and if paid by the Agency, consideration should be given to the contribution and parameters per missions (e.g. only flight, flight + taxi, public transports).

Indicators of achievement:	#9.1	Identified reliable source for the donations to offset the carbon footprint of a business travel
	#9.2	Adopted policy on the introduction of carbon offsets per business travel

ACTION #10

ADOPT A CHECKLIST FOR THE ORGANISATION OF SUSTAINABLE MEETINGS AND **EVENTS PROMOTING REMOTE ATTENDANCE AND LOW CARBON ORGANISATONAL ASPECTS**

The Agency plans to adopt a checklist for the organisation of sustainable meetings and events. The checklist would allow for a standardised level of commitment to sustainable events as well as would allow the Agency to collect and analyse data on its organised events.

Indicators of achievement:	#10.1	Adopted checklist for the organisation of sustainable meetings and events
	#10.2	Organise in-house training and accreditation for event organisers for quality assurance
	#10.3	Quarterly statistics on the Agency's events

AD#4: REDUCE COMMUTING EMISSIONS

State-of-play

The Agency is located in the city centre where modified traffic flows give priority to pedestrians, cyclists and public transport, as well as being near the most important traffic junctions and connections make it easily reachable with eco-friendly alternatives for its staff members and quests.

The Agency adopted in 2020 a Director Decision on the support granted to staff in respect of commuting to work, by which staff is incentivised to use public transport over the means of private transport.

Considerations

The Agency does face the difficulty that public transport connections and schedules may be limiting and time-consuming in respect of commuting to work.

The Commission has seven (7) different mitigation measures identified. The planned action points for the Agency under each of these mitigation measures are presented below.

Commission's mitigating measures Relevance of the measures for the Agency

4.1 Limit parking space and introduce parking fee

Reduce the number of rented parking places, or introduce incremental parking fee for individual parking use The Agency is currently renting only two (2) parking places for supporting staff with a disability with their commuting to work. As such, no further actions are foreseen under this measure.

4.2 Improve teleworking rules and practice

Improving teleworking practice by analysing the conditions when it's beneficial, supporting teleworking, and use it as an enabler for office space management The COVID-19 pandemic initiated the discussion regarding the improvement of teleworking rules and practices. As such, this measure is going to be discussed outside the scope of the Greening Action Plan 2021-2022.

4.3 Improve the commuting service helpdesk

Organising communication campaigns, drafting guidelines on low carbon commuting and individual counselling services

The Agency does not have a commuting service helpdesk, and the size of the Agency does not justify the establishment of such service.

4.4 Improve carpooling in isolated zones

Supporting carpooling under circumstances when the net benefit in terms of GHG mitigation is positive The Agency has very limited resources to invest in improving carpooling possibilities for its staff. In order to organisationally support carpooling possibilities, the Agency would need to collect, access and analyse sensitive personal data which would require the involvement of various actors of scarce resources (legal support, HR, Facility Management, etc.) Considering the above, the net benefit in terms of GHG mitigation is uncertain.

4.5 Implement a commuting fee

Implementing a mobility flat fee for all staff depending on savings generated to encourage mobility The Agency does not have the legal grounds or available resources to commit to such an action under the Greening Action Plan 2021-2022.

4.6 Promote active mobility

Supporting the use of bicycles and more generally active mobility by improving facilities and support programmes The Agency is participating in the Fit@Work initiative, which promotes an active lifestyle for staff. Apart from a wide range of resources available on the Agency's intranet site, the Agency also provides its staff with a well-equipped staff and sports facility including showers on the 1st, 8th and 16th floor, and secure bike storage.

4.7 Install chargers for electric 2wheeled vehicles

Supporting the use of light electric vehicles by installation of charging points

The Agency is looking into these aspects with the landlord, however, the final decision is with the owner of the building in terms of timing and resources. Recent recommendation regarding the fire hazard associated with electric 2-wheeled vehicles received from the Fire Department of Ljubljana is withholding most efforts in this area.

AD#5: REDUCE PURCHASE AND CONSUMPTION GHG EMISSIONS

State-of-play

The Agency already undertook a few significant steps in managing its environmental impact regarding its purchases and consumption:

- Improved waste management and sorting: the Agency's green-ambassadors group implemented a better waste management system within the Agency ensuring that sorting of waste happens already at the work station and educating staff on proper sorting of waste (individual garbage bins were removed from the working stations in most offices);
- Introducing paperless financial circuits in the financial administration by migrating to ARES and further developing IT tools reduced the use of paper across the Agency;
- Introducing e-recruitment reduced use of paper for recruitment procedures:
- Introducing e-tendering reduced use of paper for tender procedures:
- Using the services of on-site catering for events reduced the overall energy, water and waste figures;
- Improving communication in order to change staff behaviours towards the use of paper:
- Promoting 'greener' procurement, by introducing 'green' criteria in procurement documents to drive lower impact choices e.g. low-grammage office paper, longer lasting, refillable products, etc.
- Modernisation of IT equipment by replacing multifunctional and small office printers, external displays and laptops with Blue Angel or Energy Star certified equipment reducing the average energy consumption and associated toner waste;
- All Agency publications are already produced and disseminated in digital format only. In 2021, the Agency will only print leaflets for face-to-face events when these can be resumed.

Considerations

The Agency is falling behind compared to some of the measures already implemented by the Commission. The Commission has greatly reduced paper consumption through internal policies, and as such, the mitigation measures do not address paper waste management. This is, however, still of a great concern for the Agency.

The Commission has eight (8) different mitigation measures identified. The planned action points for the Agency under each of these mitigation measures are presented below.

Commission's mitigating measures Relevance of the measures for the Agency

5.1 Ban single-use plastic

Further reducing the use of plastic

The Agency does not provide any single-use plastic to its staff members. Any single-use plastic is aimed to be avoided under the established framework contracts, although such considerations were not addressed at the time of running the procurement procedure (such as catering at meeting and events). For the Agency's intents on the inclusion of environmental aspects in the future tenders see point 5.8 Develop green and collaborative procurement and Action #13.

5.2 Optimise food order quantities

Reduction of organic waste by optimising catered food amounts for

The checklist for green events (see AD#3) is intended to invite organisers to limit their food orders as to avoid wasted food.

5.3 Promote low carbon menus in canteens and events

Prioritising local, seasonal, vegetarian menus

The Agency does not have a canteen, and low carbon menus, as much as the current contractual framework allows, are provided by its on-site contractor. Having the service provider available on-site is reducing the overall energy, water and waste figures needed for catering services.

5.4 Reduce and change IT equipment

Reducing the amount of IT equipment per staff and switch to Iow-carbon IT material

To the extent possible, the use of IT equipment is optimised, upgraded and limited to the minimum needs. An area where improvement is needed is the use of local printers, which the Agency intends to improve in the course of 2021, 2022.

5.5 Optimise the lifecycle of IT devices

Prioritising IT devices meeting Ecolabel standards for energy performance; increasing average lifespan, improving procurement criteria of IT devices To the extent possible, the optimisation of the lifecycle of IT equipment is assured. No further commitment is foreseen under the Greening Action Plan 2021-2022.

5.6 Install centralised recycling and waste points

Improving waste management through the centralisation of waste points and providing information about waste sorting In 2019 the Agency's green-ambassadors group implemented a better waste management within the Agency ensuring that sorting of waste happens already at the workstation and educating staff on proper sorting of waste. No further commitments are foreseen for the years 2021-2022.

5.7 Optimise internet data consumption

Optimising data consumption by user education, monitoring of data volumes, promoting offline computing

With the current infrastructure of the Agency, internet data optimisation efforts would not have any impact on the Agency's carbon footprint.

5.8 Develop green and collaborative procurement

Reducing procurement-related emissions by improving procurement practices

Environmental aspects are included in those tender specifications, which are affected due to the subject since 2017. It is important to note, however, that some environmental aspects may be limiting the competition, and sound financial management should be considered since some environmental aspects might prove costlier. The Agency's framework contracts for stationery, printing and catering services already include environmental aspects, and these efforts are to be continued.

Based on the considerations and mitigating measure specified above, the Agency is committing to the following actions for the years 2021 and 2022, taking into account the available resources:

ACTION #11

CONSIDER FURTHER DIGITALISATION OF ADMINISTRATIVE WORKFLOWS, WHICH WOULD ALLOW A TRULY PAPERLESS OFFICE WHERE TECHNICALLY FEASIBLE (I.E.E-VOTING AND E-SIGNATORY IN ARES)

The current e-signatory technology, provided by the EC, does not allow two e-signatures to be placed in one document. E-signatory is currently not technically possible due to security constraints for members outside of EC. Solutions might become available in the course of 2021-2022.

Certain documents still require a legally binding signature (e.g. blue-ink) that potentially can be replaced by "Qualified Electronic Signatures". The certificates used for these signatures are legally binding. Although the way ARES registers documents is, at this point in time, not compatible with the use of a QES, the EC established its own working group with the purpose to resolve this issue during 2021. The Agency intends to invest in such a solution.

Indicators of achievement:	#11.1	Identified solution for the e-signatory technology needed for the Agency
	#11.2	Adopted technology for e-signatory technology depending on budget availability

ACTION #12

CONSIDER REMOVING PRIVATE/LOCAL PRINTERS AND INTRODUCE SECURE. CENTRALIZED AND ENERGY-SAVING PRINTING SERVICES, BY E.G. HAVING STAFF USE A PERSONAL PIN TO PRINT ON THE SHARED PRINTER

A limited number of personal printers are currently only in use to ensure confidentiality of printed documents. However, they are consuming a lot of power and also produce waste (toner). A "secure" printing solution can address this issue, therefore the Agency intends to reduce the number of private/local printers, to the extent possible.

One essential issue is user acceptance, since users will need to "physically wait" at the printer until the print job is done.

Indicators of achievement:

Removal of 50% of private/local printers till 2022 and create new #12.1 functionalities for the printers in the hallway to ensure confidentiality of the documents printed

ACTION #13 INCLUDE ENVIRONMENTAL ASPECTS IN THE FUTURE TENDERS OF THE AGENCY

Environmental aspects are included in those tender specifications, which are affected due to the subject since 2017. The Agency intends to further develop and improve the specifications to reduce/limit the carbon footprint of the Agency.

Indicators of achievement:	#13.1	Tenders specifications for the purchase of stationary including further environmental aspects assuring it does not limit the competition (including the possibility to purchase climate neutral paper)
	#13.2	Tenders specifications for printing services including further environmental aspects assuring it does not limit the competition

AD#6: MANAGE & COMMUNICATE

State-of-play and considerations

The Greening Action Plan 2021-2022 is part of the communication strategy and dissemination plan of the Agency. The plan is going to be regularly revisited and quarterly updates will be provided to the AB of the Agency. These complementary set of cross-domain measures essentially support the implementation of the action plan and provide indirect mitigation potential.

The Commission has six (6) different mitigation measures identified. The planned action points for the Agency under each of these mitigation measures are presented below.

Commission's mitigating measures Relevance of the measures for the Agency

6.1 Exchange and cooperate with peers

Ensuring that the greening action plan, together with the obstacles and achievements is communicated and shared with all stakeholders

The Agency intends to continue to cooperate with the Greening Network and rely on its internal and external connections to improve and to extend its knowledge base. Furthermore, apart from cooperating with the internal circles, the Agency intends to communicate its efforts to external stakeholders as well via different communication channels.

6.2 Conduct frequent feedback surveys

Ensuring a constant feedback loop with the staff by organising feedback and monitoring surveys

The Agency will monitor the survey tools used by the Commission to identify the most relevant for its own needs.

6.3 Provide guidance and reporting tools

Developing, improving the guidance and reporting process

The Agency will monitor the guidance and reporting tools used by the Commission to identify the most relevant for its own needs.

6.4 Promote good practices

Promoting initiatives and good practices observed

The promotion of good practices will be conducted on best effort basis, on the dedicated intranet site for the learning purposes of staff, and the "learn and lunch" event where staff will be guided through the available resources. Furthermore, the Agency intends to run an internal competition among its staff in order to promote good practices and the innovative ideas of its staff members.

6.5 Break down targets

Refining climate neutrality (greening action plan) targets on a smaller scale

The Agency will monitor the break down targets exercise used by the Commission to identify the most relevant approach for its own needs.

6.6 Provide GHG monitoring tools

Acquiring decision-making support tools, such as carbon simulators, travel simulators, monitoring systems The Agency will monitor the tools used by the Commission to identify the most relevant for its own needs.

The Agency is committing to the following actions for the years 2021 and 2022, taking into account the available resources:

ACTION #14 PARTICIPATION IN AND CONTRIBUTION TO THE GREENING NETWORK. **ATTENDANCE ON MEETINGS**

The Agency is intending to continue to contribute to the Greening Network with its best practices, and to reach out to the colleagues in the network for similar practices, templates, statistical information.

Indicators of achievement:	#14.1	Templates for tender specifications received from colleagues for the planned procurement procedures (new premises, stationery, printing)			
	#14.2	Attendance on Greening Network meeting(s)			
	#14.3	Sharing the Greening Action Plan 2021-2022 and its achievements with the other agencies in the Greening Network			

ACTION #15 PUBLIC COMMUNICATION ON THE GREENING EFFORTS OF THE AGENCY

The Agency intends to promote and communicate its greening efforts to its external stakeholders by establishing a webpage on the Agency's website.

Indicators of	#15.1	Webpage created and up and running on the website
achievement:	#15.2	Updated webpage upon conclusion of achievements

ACTION #16 SHARING OF GOOD PRACTICES

The Agency intends to provide learning opportunities to its staff members with regards to educating themselves on the individual actions for reducing their carbon footprint. The Agency intends to reach out to the European Environmental Agency and request for available resources to be shared (lectures, studies, training materials, etc.)

Indicators of achievement:	#16.1	Sharing good practices gathered on the Agency's dedicated intranet page
	#16.2	Provide "learn & lunch" session to staff, guiding through the available resources

ACTION #17 ANNUAL COMPETITION OF VOLUNTEERS FOR A GREEN CHANGE

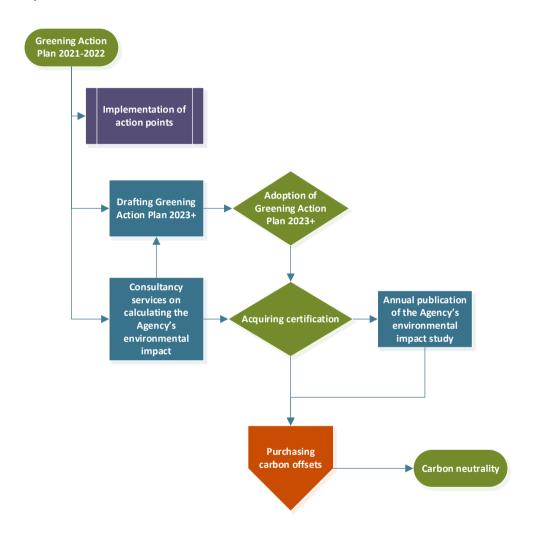
The Agency intends to launch an annual competition among staff under the flagship of "Volunteers for a green change" inspired by the previously organised online workshops of the EMAS (EU Eco-Management and Audit Scheme) network.

Indicators of achievement:	#17.1	Established competition rules
	#17.2	Awarded winner of the annual competition

THE AGENCY'S PATHWAY TO NET ZERO

The Greening Action Plan 2021-2022 is the first step in the Agency's attempts to mitigate its climate impacts, with the ultimate goal being to reach climate neutrality. While much can be achieved in respect of reduction of the Agency's carbon footprint already at this point in time, the Agency will have to gain an overview on its current emissions. As such, in order to achieve climate neutrality, the Agency will have to establish its certified carbon footprint calculation. The findings of the carbon footprint calculations will allow the introduction of further carbon reduction strategies, as well as allow for better planning with regards to offsets.

As such, the Agency foresees the following overall plan, without an established timeline, for its pathway to net zero:



The further steps the Agency is going to take towards carbon neutrality will start already during the implementation of the current action plan, aiming to establish certification through which the Agency will be able to publish its environmental impact on an annual basis. Based on the findings, the Agency will be able to better tailor its environmental reduction plan and compensate the carbon emissions by purchasing offsets. Such intentions shall be included in the Agency's multiannual financial planning.

Annex I



Report on the use of energy deriving from renewable energy sources in Slovenia and the negotiations with the proprietor on the use of 100% green electricity on the premises at the **European Union Agency for the Cooperation of Energy Regulators**

Prepared by the Facility Management Team

December 2020

Abbreviations and references

FU European Union

The Agency European Union Agency for the Cooperation of Energy Regulators

Proprietor CEREEF d.o.o., the owner of the Agency's headquarters located at

Trg republike 3, 1000 Ljubljana (building TR3)

RES Renewable energy sources

Slovenian NRA National Regulatory Authority of Slovenia, Agencija za energijo (Energy

Agency), https://www.agen-rs.si/

Tariff calculator Tariff calculator provided by the Slovenian NRA.

Primerjalnik ponudb :: Namen porabe elektricne energije

Introduction

The EU is at the forefront of the global energy transformation, therefore the Agency aspires to be among other exemplary EU Agencies with its attempts of *greening* the institution. Among various focus areas in which the Agency is aligning its way of working to a climateconscious, responsible approach, it is now drawing more attention to the possible steps it can take to better rely on RES.

The Agency is renting its office premises with the prerequisite that utility providers are handled by the landlord, and as such the Agency does not have a direct contractual relationship or a decision making power regarding the providers of electricity. Therefore the Agency initiated negotiation with the landlord on increasing the building's reliance on RES.

In order to have justified claims for the landlord, the Agency has done an in-depth analysis on the state of play of the share of RES in final energy consumption and the energy suppliers available in the Republic of Slovenia.

State of play in Slovenia

The 2020 targets of the EU climate and energy package, aimed to increase the share of RES in final energy consumption by 20%, increase energy efficiency by 20% and reduce greenhouse gas emissions by 20%. Within these commitments, the binding total share of RES in final energy consumption for Slovenia is 25%. The target shares of RES for individual sectors set in the National Renewable Energy Action Plan 2010-2020 are as follows: electricity 39.3%, heating and cooling 30.8% and transport 10.5%. The share of RES in final energy consumption is influenced by changes in the use of RES and by the final energy consumption. In 2018, the share of RES in final energy consumption in Slovenia was 21.15%, which was 3.85% less than the target share for 2020, and the estimate for 2019 shows a 3.15% lag behind the target share; it is not possible to catch up on the delay in 2020. The sectoral target share of RES was exceeded only in energy consumption for heating and cooling. This sector saw a 31.61% share of RES in final energy consumption in 2018, while the 2019 estimate is 31.89%. In addition to the increase in RES used for heating and cooling, the progress is mainly due to the reduction in energy used for heating and cooling, mostly in industry. In the electricity and transport sectors, Slovenia lagged behind the sectoral targets both in 2018 and in 2019, with significant progress being made in the transport sector between 2017 and 2018. According to estimates, this trend continued in 2019 with an estimated 7.09% share. The share of RES in the electricity sector has been between

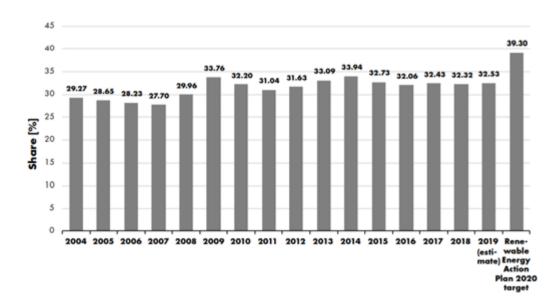
31.04% and 33.94% since 2009; in 2018, it came in at 32.32%, and the estimate for 2019 shows an increase of 0.21 percentage points compared to the previous year.

Slovenia's integrated National Energy and Climate Plan 2021-2030 proposes at least 27% share of RES in final energy consumption by 2030, while the EU target is set to at least 32%. With the increasing targets and foreseeable additional policies and measures imposed, the forward thinking approach is to initiate necessary implementations at an early stage for effortless transition period.

While doing the research we have also learned the renewable electricity share in Slovenia grew only by 3.67% in the 2005–2018 period. The greatest progress was made in the 2007–2009 period, which is largely related to the RES share calculation method. In determining the share of RES in final energy consumption, the actual annual electricity production is not taken into account; rather, renewable electricity share is determined using the methodology1 prescribed in Directive 2009/28/EC.

See graph on the shares below:

Renewable electricity share in Slovenia in the 2005-2019 period



Sources: Jožef Stefan Institute, Statistical Office of the Republic of Slovenia

The Tariff Calculator

The web site of the Slovenian NRA provides a number of different information regarding the purchase of energy from renewable sources, its efficient use, legislation and more, including information dedicated to consumers.

In our initial steps in conducting this research we relied on common search engines when looking for suppliers who offer a substantial share of energy coming from renewable sources, which did not provide sufficient information on the realistic state of play on the Slovenian market. The reason for this most probably lies in the fact that offers most of the time vary depending on consumptions, and are most of the time done as specific stand-alone offers for potential buyers.

Because of these limitations we turned to a more efficient source of information - the tariff calculator.

Based on the information provided by the tariff calculator we have discovered that some energy providers in Slovenia offer a substantially bigger share of energy coming from renewable sources than the share that the current supplier of energy of the proprietor has. The calculator allows the user to browse through the possible energy suppliers, and to compare offers based on consumption either as an individual, or as a small business. The below provided information is a summary of the information found in the tariff calculator and was downloaded on the date 27.11.2020.

The below table lists all the available energy suppliers in Slovenia. Under the column "Share of RES" we have collected the overall share of RES as provided by the companies to their customers. Under the column "Offer for small companies", the share of RES is indicated for the companies that do have special offers for small businesses, among which one company seems to offer a 100% share of RES to its business customers.

Electricity supplier	Share of RES		Offer for small companies
ADRIAPLIN, Podjetje za distribucijo zemeljskega pl		29.00%	
E 3, ENERGETIKA, EKOLOGIJA, EKONOMIJA, d.o.o.		8.23%	
E.ON Ljubljana, energetske storitve, d.o.o.		99.20%	99.20%
ECE, energetska družba, d.o.o.		24.03%	100.00%
Elektro energija, podjetje za prodajo elektrike in		4.67%	4.67%
Elektro Maribor Energija plus, podjetje za trženje		7.57%	7.57%
ELEKTRO PRODAJA E.U. d.o.o., družba za prodajo ene	N/A		
Energia gas and power d.o.o.		1.36%	1.36%
ENERGIJA DIREKT, prodaja energentov, d.o.o.		22.07%	
GEN-I, trgovanje in prodaja električne energije, d		8.13%	8.13%
HEP Energija, trgovanje in prodaja električne ener		56.00%	56.00%
HOLDING SLOVENSKE ELEKTRARNE d.o.o.		100.00%	
INVOLTA d.o.o.		1.37%	
JAVNO PODJETJE ENERGETIKA LJUBLJANA d.o.o.		4.63%	4.63%
PETROL, Slovenska energetska družba, d.d., Ljublja		7.11%	7.11%
SODO sistemski operater distribucijskega omrežja		1.00%	1.00%
SONCE energija d.o.o.	N/A		
TELEKOM SLOVENIJE, d.d.		5.94%	

The tariff calculator compares electricity supply costs and allows the user to get acquainted with electricity suppliers, the electricity supply offer and network charges. It includes all price lists entered into the application by suppliers and approved by the Energy Agency. The

electricity suppliers are primarily responsible for the up-to-dateness and accuracy of the data, while the Agency takes care of the basic validation by confirming the submitted data.

Electricity suppliers are obliged to publish to their customers, on invoices and promotional materials, the composition of the electricity generation sources supplied in the previous calendar year. These shares must be published by suppliers in the form of a table in which the shares of individual production sources (coal and lignite, natural gas, petroleum products, nuclear fuel and renewables) are expressed as a percentage and in the form of a pie chart. Suppliers may offer electricity exclusively from renewable sources or high-efficiency cogeneration, for which they may make specific stand-alone offers.

It is also important to note that the calculator does not offer any possibility to compare offers for high energy consumers or bigger businesses, therefore the information as presented above may not be applicable to the proprietor of the Agency's headquarters. Furthermore, we have identified a significant difference in the prices of energy depending on the share of RES. In cases where companies provide close to, or 100% share of RES, the prices are 26 % to 56 % higher compared to the cheapest competitor with significantly lower share of RES.

Efforts with the proprietor

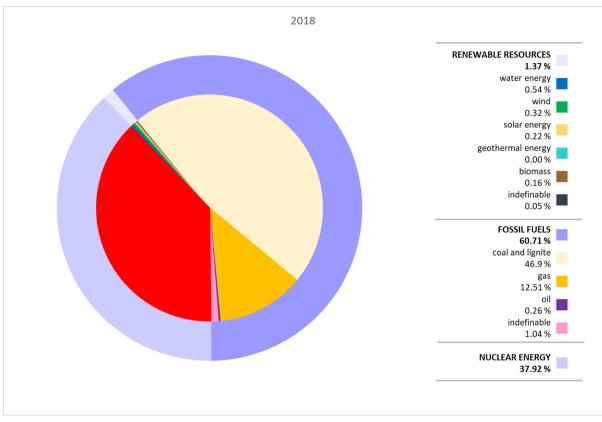
The Agency has had several conversations with the proprietor on the topic of green energy, especially green electricity. We initially, in the beginning of October 2020, inquired whether the proprietor has a contract for electricity with a company that enables the supply of green energy; and in case the energy supplier with whom they have a contract does not provide this, whether they are considering replacing the energy supplier with one that enables the supply of green electricity and when.

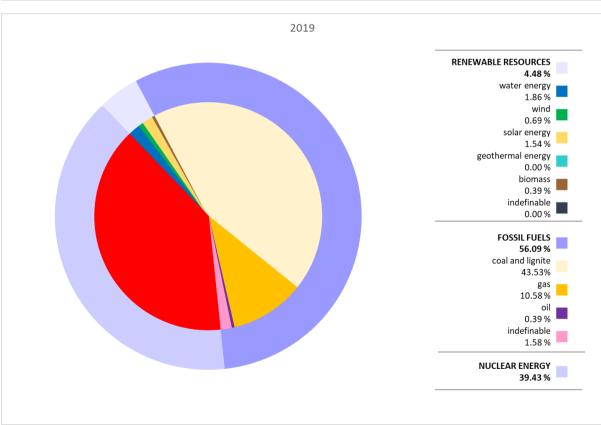
In their initial reply the proprietor provided us with the following information: The supplier of electricity in the TR3 building is Elektro Energija Ljubljana and the energy provided does contain a certain share of green energy.

Composition of the production sources for electricity production in 2018 and 2019

On the below pie charts we can see the composition of the production sources for electricity production in 2018 and 2019 with Elektro Energija Ljubljana, where the increase in green energy (and therefor electricity) can be seen.

Composition of the production sources for electricity production in 2018 and 2019:





The pie charts show there has been an increase in the share of energy from renewable sources, mostly "at the expense" of fossil fuels.

- In 2018 nuclear fuels represented 37.92%, fossil fuels 60.71% and renewable sources
- In 2019 nuclear fuels represented 37.43%, fossil fuels 56.09% and renewable sources 4.48%.

Based on the information acquired from the proprietor and the Slovenian NRA, we again approached the proprietor on the 30th November 2020 to ask the following questions via e-mail:

- 1. Do you use the tariff calculator available on the web site of the Slovenian Energy Agency when looking for electricity suppliers as it provides a vast array of information?
- 2. Have you ever and/or recently acquired an offer from a supplier that offers only or a high share of energy coming from renewable sources, to make a price comparison with other suppliers, which have a lower share of renewable energy e.g. current one?
- 3. How do you normally proceed with the choice of energy providers for your building? Which are the main criteria? Do you give priority to suppliers who offer a high share (even 100% of energy coming from renewable sources?
- 4. Do you have a possibility to negotiate offers and conditions provided by electricity suppliers due to being a high electricity consumer?
- 5. Share of RES in final energy consumption may be increased by lowering the overall consumption. energy

Article 5 of the Decree on Ensuring Energy Savings prescribes measures for achieving final energy savings for final business customers, the implementation of which must be encouraged by energy suppliers. These measures aim at reducing energy consumption by business customers. Final energy savings for business customers can be achieved by the following measures:

- comprehensive renovation of buildings;
- o renovation of individual elements or the entire outer envelope of buildings;
- installation of solar receivers, heat pumps and other devices for the production of heat from renewable energy sources;
- installation of energy efficient lighting systems in buildings;
- energy efficient outdoor lighting;
- energy efficient household appliances;
- installation of energy efficient electric motors;
- installation of frequency converters;
- increasing the efficiency of compressed air preparation systems;
- installation of devices for efficient cogeneration;
- replacement of electric stoves with new wood biomass boilers;
- replacement of electric stoves with new gas boilers.

5.a. Are you in any way looking into these options or was something similar done lately? 5.b. Are you looking into other ways of reducing energy consumption, not listed above?

- 6. The 2020 targets of the EU climate and energy package aimed to increase the share of renewable energy sources in final energy consumption by 20%, increase energy efficiency by 20% and reduce greenhouse gas emissions by 20%. The 2030 targets, however, aim to increase the share of renewable energy to at least 32%, reduce greenhouse gas emissions by at least 40%, increase energy efficiency by at least 32.5%, and guarantee at least 15% electricity inter-connection levels between neighbouring Member
 - With respect to the above, what are your short-term and long-term strategic plans in order to better align your building management to the climate-conscious targets as set by the EU?
- 7. Are there relevant, unique circumstances which pose special challenges in your attempts to implement climate-conscious solutions in the building?
- 8. Due to its many benefits, energy efficiency in European energy policy has become important for achieving sustainable management of natural resources. The aim of

European energy policy was to reduce energy consumption by 20% by 2020 and between 30% and 40% by 2050, which is what our Agency also strives for. For this reason we would also like to inquire if you foresee in the near future a call for a tenants meeting where you as the proprietor and we as tenants could discuss the possibilities for implementing changes in energy consumption and supply, as I have mentioned to you on several occasions?

In addition to asking these questions, we also again expressed our wish for the proprietor to consider switching the energy/electricity provider, which offers at least a bigger, if not a 100% share of RES, not only in writing but also over several telephone meetings.

On 4th December 2020 we received the following reply:

The building TR3 is a monument-protected building. As a result, the possibilities for energy improvements, are limited. CEEREF d.o.o. has currently a contract for the supply of electricity for years 2021 and 2022 with Elektro energija doo. They have forwarded our request to their supplier to see, if there is a possibility of improvement in terms of greater participation of electricity from renewable sources, what the price is and when this would be possible under the existing contract.

Outcome of the negotiations with the proprietor

Following some additional telephone conversations, the proprietor informed us later in the day of 4th December 2020 that for 2021 and 2022 CEEREF d.o.o. has decided to pay extra for the purchase of 100 % green energy. Only "green energy" will be supplied, and the supplier will provide a certificate of origin i.e. a certificate with which they will demonstrate the purchase of green energy, issued in the year after delivery. Specifically for the delivered energy in 2021, they (and we) will receive a certificate at the beginning of 2022.

Mapping the Agency's efforts among other institutions

Meanwhile, in order to map our efforts among other institutions, the Agency also reached out to our colleagues around the agencies and institutions through the Greening network. We asked for basic information regarding the current share of RES in their energy consumption and whether they rent or own their premises.

At the time of finalising this report, the Agency received seven (7) responses from colleagues of the Greening network. We have learned that many agencies and institutions are in a different situation, as they own their premises. However, we have received feedback from two institutions that also rent their premises, and as such their situation is more comparable to that of the Agency. While one of these institutions use 100% RES, the other institution currently does not use RES at all, however intends to achieve 100% RES in their energy consumption after concluding their procurement procedure for the rental of office premises. We are still in touch with these institutions in order to gather further input on how they best manage their contracts to be in line with their greening attempts.

Steps forward, taking into account the Agency's constraints regarding budget and human resources available

The biggest steps the Agency has made in the current year (2020) to increase its energy efficiency was the discontinuation of providing water in water gallons, plastic bottles and discontinuation of providing plastic cups, the reduction of parking spaces and the extensive decrease of travel, which was largely replaced by video-conferencing.

From 2021 onwards, as the first and most important step and the outcome of negotiations with the proprietor, the Agency will start using electricity coming only from 100% renewable energy sources.

The Agency will also continue negotiating with the proprietor on the possible ways the building's energy efficiency may be improved, which would allow lowering our consumption and would bring the Agency another step further in its greening efforts. Such steps will pursued with the current proprietor until the expiry of the current lease contract. More focus should be placed on such requirements in the upcoming procurement procedure for renting new premises.