

# EUSAIR bringing the Green Deal to the region

### Indicators, baselines, milestones and targets

26/01/2022



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## **Table of contents**

In	troduction	5
1.	Approach to indicators quantification	6
2.	Baselines and proposed targets and milestones	10
	2.1 Context indicator: Estimated GHG emissions	10
	2.1.1 Description of the indicator	10
	2.1.2 Calculation of the baseline	10
	2.1.3 Calculation of targets and milestone	11
	2.2 Result indicator: Estimated greenhouse emissions	14
	2.2.1 Description of the indicator	14
	2.2.2 Calculation of the baseline	14
	2.2.3 Calculation of targets and milestone	17
	2.3 Output indicator: Non-national participations (in presence)	20
	2.3.1 Description of the indicator	20
	2.3.2 Calculation of the baseline	20
	2.3.3 Calculation of targets and the milestone	21
	2.4 Output indicator: National participations (in presence)	22
	2.4.1 Description of the indicator	22
	2.4.2 Calculation of the baseline	22
	2.4.3 Calculation of targets and the milestone	23
	2.5 Output indicator: Remote participations (online)	23
	2.5.1 Description of the indicator	23
	2.5.2 Calculation of the baseline	24
	2.5.3 Calculation of targets and the milestone	24
	2.6 Output indicator: Number of meetings	25
	2.6.1 Description of the indicator	25
	2.6.2 Calculation of the baseline	25

2.6.3 Calculation of targets and the milestone	25
2.7 Output indicator: Total number of days of meetings	26
2.7.1 Description of the indicator	26
2.7.2 Calculation of the baseline	26
2.7.3 Calculation of targets and milestone	26
2.8 Process indicator: Number of procedures according to EU GPP published and implemented	27
2.8.1 Description of the indicator	27
2.8.2 Calculation of the baseline	29
2.8.3 Calculation of targets and the milestone	29
2.9 Input indicator: Expenses for GPP/ total expenses for PP	30
2.9.1 Description of the indicator	30
2.9.2 Calculation of the baseline	30
2.9.3 Calculation of targets and milestone	31
3. Overview of the proposed targets and milestones	33
Recommendations	35
Annex	37
1. Context indicator	37
2. Result indicator	38

## Acronyms

ADRION: Interreg V-B Adriatic-Ionian programme EC: European Commission ESR: Effort Sharing Regulation ETS: Emissions Trading System EU: European Union EUSAIR: EU Strategy for the Adriatic and Ionian Region FAIC: Forum of the Adriatic and Ionian Cities FORA: Forum AIC, UniAdrion, FAIC Forum AIC: Forum of the Adriatic and Ionian Chambers of Commerce GHG: Greenhouse Gas Emission GPP: Green Public Procurement PP: Public Procurement TSG: Thematic Steering Group UNFCCC: United Nations Framework Convention on Climate Change UniAdrion: Forum of the Adriatic and Ionian Universities

## Introduction

The present report illustrates the quantification of the baseline (2018), targets (2025, 2030, 2050), and milestone (2040) of the indicators system proposed to the EUSAIR governance system to measure its contribution to the EU climate targets. It is based on a discussion paper delivered in August 2021 that detailed the scope and structure of this indicators system.

The **first chapter** of the report presents the approach to quantification, indicating the sources of information for the input, process, output, direct result and context indicators. In particular, details on the methodology used to collect information relevant to the baseline (survey on a sample of EUSAIR stakeholders) are provided.

The **second chapter** illustrates the findings of the report. Targets, milestones and baseline are calculated for the context indicator, direct result indicator, output indicators, process indicator, and input indicator. Building on the framework developed in the discussion paper, the chapter also includes definitions of the indicators and an explanation of the links between them.

The **third chapter** underlines the capacity of the proposed indicators system to measure the contribution of the EUSAIR governance system to the EU climate targets.

Finally, the **fourth chapter** includes a series of recommendations to help using the indicators system in a sound way and reach the proposed targets over the decades.

## 1. Approach to indicators quantification

The principles followed to quantify the targets and milestones of the indicators vary depending on the type of indicator considered in the system. This differentiation is linked to the nature of the indicators. In particular, the context indicator, which is used as a reference in the system, is independent from EUSAIR governance activities. Instead, the other indicators depend on the intensity and modality of the meetings that are necessary to ensure good governance in the context of the EUSAIR. Therefore, the sources of the indicators are not the same for all of them. The context indicator is based on regulatory and statistical sources, while the remaining four indicators are based on information generated by the EUSAIR stakeholders through their governance-related activities.



The <u>context indicator</u> concerns the annual greenhouse gas emissions of each of the nine countries considered in this study.

The reference year for the baseline is 2018 and target values have been set for 2025, 2030, 2050. The proposed system also includes a milestone in 2040. Based on calculations at single-country level, the system proposes per capita values at EUSAIR level for the years 2025, 2030, 2040, 2050.

The pace of reduction for the period 2021-2030 is prescribed by Regulation (EU) 2018/842/EC, which sets out binding annual greenhouse gas emission reductions for each Member State. These reduction targets are consistent with the commitments taken by Member States under the Paris Agreement. More in detail, it has been considered that the European Commission published on 14 July 2021 an Impact Assessment

Report accompanying Regulation 2018/842/EC in which the targets at Member State level are updated with more ambitious ones. Given that the context indicator is used in the current system of indicators as a benchmark to indicate the path to carbon neutrality, it was decided to consider the most ambitious scenario set by the European Commission, i.e. a 40% reduction in 2030 compared to 2005.<sup>1</sup>

However, in applying such a regulatory framework to the present system of indicators, it should be considered that the above-mentioned Regulation is not applicable to the whole EUSAIR area. Indeed, the geographical scope of the Regulation is the EU, with specific targets set for each of the EU 27 Member States, while the EUSAIR also involves five non-EU countries: four of them are currently candidate countries (Albania, the Republic of North Macedonia, Montenegro, Serbia) and one, Bosnia and Herzegovina, is a potential candidate. As explained in detail in the paragraph "Result indicator: greenhouse gas emissions", national plans setting targets for 2030 have been taken into account.

Furthermore, it shall be noted that Regulation (EU) 2018/842 sets targets for 2030, whereas the proposed system of indicators includes two further targets, namely 2025 and 2050, plus the proposed 2040 milestone.

The European Green Deal states that by 2050 Member States should achieve zero net greenhouse gas emissions, decoupling economic growth from resource use. This implies both reducing greenhouse gas emissions and increasing the capacity to remove carbon through land use, forests, and dedicated technologies.

In the present system of indicators, the baseline in 2018 is therefore set on the basis of statistical sources (aggregated by the World Bank), the targets for 2030 and 2050 are set in accordance with the EU regulatory framework and the national plans of the non-EU countries, while the target for 2025 and the 2040 milestone are calculated according to a mathematical linear formula.

A different approach has been used to quantify **<u>output</u>**, **<u>process</u> and input indicators**, as they depend directly on:

- The participation in EUSAIR-related meetings (output level);
- The type of public procurement procedures according to EU GPP implemented in the organisation of EUSAIR-related meetings (process level);<sup>2</sup>
- The percentage of funds disbursed according to green public procurement procedures out of the total funds disbursed for public procurement in the organisation of EUSAIR-related meetings (input level).

As with the context indicator, the baseline is 2018. In this case, however, the source of information is not statistical but depends on the choices made by the organisers of the meetings that were required for the EUSAIR governance in 2018. It is up to them, indeed, to establish the number of participations (non-

<sup>&</sup>lt;sup>1</sup> It appears necessary to point out that Regulation (EU) 2018/842/EC takes as reference year for the baseline 2005, while the European Green Deal targets are compared to the year 1990. As the present system of indicators takes 2018 as a reference year, new calculations have been made to relate the targets (2025, 2030, 2050) and the milestone (2040) to 2018 as baseline..

<sup>&</sup>lt;sup>2</sup> It is worth noting that the discussion paper foresaw two process indicators, i.e. "Number of procedures according to EU GPP published" and "Number of procedures according to EU GPP successfully implemented". For the sake of simplification, in the present report they were transformed into only one indicator, i.e. "Number of procedures according to EU GPP implemented".

national and national) in the meetings over the years, the modality of participation (in presence or remote) and, when not legally predetermined, also the type of public procurement procedures to be put in place (based on green criteria or not).

Given that the overall number of EUSAIR meetings in 2018 was 34, collecting information from a sample of 10 meetings was deemed appropriate. Six typologies of meetings were identified, and for each category at least one structured questionnaire interview was conducted. The following table reports the categories of meetings, the number of meetings organised in 2018 in each category, and the number of interviews conducted for each category. Finally, the weight of the sample at category level is indicated.

Category	Number of meetings (2018)	Number of interviews (sample)	Weight
TSG	12	2	6
Governing Board	2	2	1
Facility Point events	3	1	3
EUSAIR Forum	1	1	1
Interreg Adrion	reg Adrion 15		5
Events organized by FORA/main stakeholders	1	1	1
Total	34	10	17

Table 1 – Category of meetings

The values obtained from data collection for each meeting category were multiplied by the corresponding weight. The sum of all values obtained was considered as the baseline (2018). These calculations were made for the five output indicators, namely Non-national participations (in presence), National participations (in presence), Remote participations (online), Number of meetings, and Total number of days of meetings.

As explained in the paragraph on output indicators, in order to calculate the targets (2025, 2030, 2050) and the milestone (2040), assumptions have been made on the evolution of the number of meetings, nonnational and national participations in presence, remote participations. These hypotheses could be further validated and consolidated if it were decided to consult EUSAIR stakeholders through a series of focus groups on the proposed targets and milestones for output indicators.

As with the output indicators, the calculations concerning processes and input indicators are based on the baseline set in 2018. However, in the case of green public procurement, the assumptions are guided by the EU regulatory framework that requires the progressive adoption of green criteria in the process of public purchasing. It has been assumed that, given the statute of candidate or potential candidate countries, non-EU countries will progressively adhere to the EU rules.

Finally, the quantification of the <u>result indicator</u> was based on three output indicators, i.e. Non-national participations (in presence) and National participations (in presence), Remote participations (online). It is worth noting that, at the present stage, the proposed system of indicators measures greenhouse gas

emissions only in relation to travel related to the EUSAIR governance and assumes that online meetings produce negligible greenhouse gas emissions. The trend of the in presence participations, combined with the evolution of emission factors over time, determines the target values and milestones of the proposed system of indicators. Finally, it has to be underlined that the system measures single in presence *participations*, so allowing to capture information related both to fully in presence meetings and hybrid meetings, that are expected to be the typology of meetings most commonly chosen within the governance of EUSAIR, as explained in the following chapter.

## 2. Baselines and proposed targets and milestones

#### 2.1 Context indicator: Estimated GHG emissions

#### 2.1.1 Description of the indicator

The context indicator "Estimated GHG emissions" provides information on the trend of the macroregional area. This indicator represents the amount of GHGs emitted per person per year, in tons of CO2. Unlike the other indicators, this one is based on statistical sources. In order to have a homogeneous database, the data were collected from a single official statistical source. All data was downloaded from the World Bank website.<sup>3</sup>

The macro-regional area is composed of nine countries: Albania, Bosnia and Herzegovina, Croatia, Greece, Italy, Montenegro, North Macedonia, Serbia, and Slovenia. To obtain an aggregate value, which does not keep into account the size of each country, the context indicator is calculated by dividing the total GHG emission of each country by its population. This calculation allows a standard value to be expressed, regardless of the size of the country. Adding up each value and dividing by the number of countries seems to be misleading, given the very different sizes of the countries. The value per capita gives a more comparable value that could be used to compare values from other countries and/or other macro regions.

#### 2.1.2 Calculation of the baseline

The calculation of the baseline for 2018 is shown in Table 1, which indicates for each country the value of total greenhouse gas emissions, expressed in kt of CO2 (a), the total population (b) and the greenhouse gas emissions per capita (c), which were calculated by computing the ratio of each country's total greenhouse gas emissions (expressed in tons instead of kilotons) and its population. The value of the context indicator for the macro region, expressed in tons of CO2 per capita, is calculated by dividing the total of greenhouse gas emissions by the population of the macroregional area. The value of the baseline for the context indicator is 6.85 tons of CO2 for 2018.

<sup>&</sup>lt;sup>3</sup><u>https://data.worldbank.org/indicator/EN.ATM.GHGT.KT.CE</u> <u>https://data.worldbank.org/indicator/SP.POP.TOTL</u>

https://databank.worldbank.org/source/population-estimates-and-projections#

News	Baseline: 2018					
Name	<mark>a</mark> -Total GHG emissions (kt of CO2 equivalent)	<mark>b</mark> -Total population	c-GHG emissions per capita (tons of CO2) c =a*1000/b			
Albania	10 080	2 866 376	3.52			
Bosnia and Herzegovina	27 190	3 323 929	8.18			
Croatia	22 550	4 087 843	5.52			
Greece	84 750	10 732 882	7.90			
Italy	399 600	60 421 760	6.61			
Montenegro	3 800	622 227	6.11			
North Macedonia	10 510	2 082 957	5.05			
Serbia	62 600	6 982 604	8.97			
Slovenia	17 170	2 073 894	8.28			
MACRO REGION*	638 250	93 194 472	6.85			

Table 1 - Baseline of the context indicator GHG emissions

\*The total is based considering the emission of the entire country Source: World Bank

#### 2.1.3 Calculation of targets and milestone

For the calculation of targets and milestones, two different approaches have been adopted for EU and non-EU countries.

<u>For the EU Member States</u>, the 2030 target has been set based on the impact assessment report of the Effort Sharing Regulation (Regulation (EU) 2018/842), while the 2050 target has been set according to the target of Regulation (EU) 2013/525. The targets are identified assuming the full implementation of existing EU climate, energy, transport, and energy policies. For climate, this includes the revised ETS Directive, the Effort Sharing Regulation, and the LULUCF Regulation<sup>4</sup>, and it assumes the achievement of the target of at least 40% GHG reductions by 2030. For energy, it includes the Energy Efficiency Directive and the Renewable Energy Directive.<sup>5</sup>

The impact assessment report of Regulation (EU) No 2018/842 reports revised targets for 2030 for each Member State compared to 2005 values (instead of 1990). This document analyses a range of theoretical policy options differentiated in terms of scope both the Effort Sharing Regulation and the Emissions Trading System. Between the two options actually considered in the document, **the most ambitious one has been chosen**. A strong increase in the overall ESR target is analysed under this option. This corresponds to the cost-efficient contribution of the relevant sectors - the current ESR sectors within an unchanged scope - to the overall 55% net GHG emissions reduction target. This option implies a reduction

<sup>&</sup>lt;sup>4</sup> Regulation (EU) 2018/841

<sup>&</sup>lt;sup>5</sup> Directive (EU) 2018/2001

in emissions in these sectors of 39% to 40% compared to 2005, an increase of 10 to 11 percentage points relative to the baseline.

The context indicator is being considered as a kind of benchmark. Consequently, it seems appropriate to propose the most advanced target (among those established in the EU policy framework) to the EUSAIR stakeholders.

<u>For the non EU Member States</u>, a different approach has been used when it comes to 2030. National plans setting targets for 2030 have been taken into account:<sup>6</sup>

- Albania has a target of -11.5% compared to 2016 emissions, "ALBANIA REVISED NDC" (2021);<sup>7</sup>
- Bosnia and Herzegovina has a target of -33.2% compared to 1990 emissions, "NATIONALLY DETERMINED CONTRIBUTION OF BOSNIA AND HERZEGOVINA (NDC)" (2021);<sup>8</sup>
- Montenegro has a target of at least -35% compared to 1990 emissions, "Updated NDC for Montenegro" (2021);<sup>9</sup>
- North Macedonia has a target of -51% compared to 1990 emissions, "Enhanced Nationally Determined Contribution" (2021);<sup>10</sup>
- Serbia has a target of -9.8% compared to 1990 emissions, "Intended Nationally Determined Contribution of Republic of Serbia" (2017).<sup>11</sup>

As far as the 2050 targets are concerned, the method applied for non EU countries does not differ from the one used for EU Member States, as they were defined according to the target set in the Regulation (EU) 2013/525.

The percentage reduction for the 2025 targets has been calculated on the basis of the 2030 targets. More specifically, assuming a linear trend from 2005 to 2030, the 2025 targets represent 80% of the 2030 target (for EU countries). As can be seen in Table 2, those percentages are calculated on the basis of their respective target for the 2030 targets and of the reference year.

The 2050 targets reflect the decision in Regulation (EU) 2013/525, in line with Sustainable Development Goals targets, to achieve net zero emissions, for which is required a 95% reduction in GHG emissions compared to 1990 emissions.

<sup>&</sup>lt;sup>6</sup> All national plans have been collected from the NDC Registry of the UNFCCC. https://www4.unfccc.int/sites/NDCStaging/Pages/Home.aspx

<sup>&</sup>lt;sup>7</sup>https://www4.unfccc.int/sites/NDCStaging/Pages/Party.aspx?party=ALB&prototype=1

<sup>&</sup>lt;sup>8</sup>https://www4.unfccc.int/sites/NDCStaging/Pages/Party.aspx?party=BIH&prototype=1

<sup>&</sup>lt;sup>9</sup>https://www4.unfccc.int/sites/NDCStaging/Pages/Party.aspx?party=MNE&prototype=1

<sup>&</sup>lt;sup>10</sup>https://www4.unfccc.int/sites/NDCStaging/Pages/Party.aspx?party=MKD&prototype=1

<sup>&</sup>lt;sup>11</sup><u>https://www4.unfccc.int/sites/NDCStaging/Pages/Party.aspx?party=SRB&prototype=1</u>

The same methodology used for 2025 targets has been applied to determine the 2040 milestone. The value is calculated as the mid point oft he total emissions in 2030 and 2050, assuming linear development over these 20 years.

Name	Target	2025	Target 2030 Mileston e 2040				Target 2050 compared to 1990	
	80 % of 2030 target	Tons of CO2 per capita	Reg. (EU) 842/2018 and National target	Refere nce year	Tons of CO2 per capita	Tons of CO2 per capita	Reg. (EU) 525/2013	Tons of CO2 per capita
Albania	-7%	3.01	-12%	2016	3.13	1.55	-95%	0.24
Bosnia-Herzegovina	-29%	4.60	-33%	1990	6.44	3.19	-95%	0.56
Croatia	-13%	6.17	-16%	2005	6.13	3.08	-95%	0.43
Greece	-18%	9.78	-22%	2005	9.48	4.71	-95%	0.52
Italy	-34%	6.24	-43%	2005	5.50	2.63	-95%	0.46
Montenegro	-31%	4.65	-35%	1990	2.71	1.29	-95%	0.22
North Macedonia	-45%	3.29	-51%	1990	3.34	1.56	-95%	0.38
Serbia	-9%	9.18	-10%	1990	11.39	5.83	-95%	0.74
Slovenia	-22%	7.23	-28%	2005	6.77	3.27	-95%	0.46
MACROREGION		6.65			6.34	3.08		0.48

Table 2 Townships and as the st				
Table 2 - Targets and milesto	one of context indicator	per country (referrea to	reference years consid	erea in regulatory aocuments)

The complete table is provided in the Annex

The value for the macroregional area follows the same approach as for the baseline. As emerges from the table, the macroregional values for 2025 (6.65 tons of CO2 per capita) and 2030 (6.34 tons of CO2 per capita) present a slight decrease compared to the baseline (6.85 tons of CO2 per capita). However, over the following 20 years, the trend is in sharp descent and likely to reach the value of 0.48 tons of CO2 per capita.

Table 3 - Summary table Context indicator: Baseline, Targets, Milestone

Indicator	Unit of	Baseline	Target	Target	Milestone	Target
	measurement	2018	2025	2030	2040	2050
Estimated greenhouse emissions (focus on transportation)	Tons of CO2 per capita	6.85	6.65	6.34	3.08	0.48

#### 2.2 Result indicator: Estimated greenhouse emissions

#### 2.2.1 Description of the indicator

The direct result indicator "Estimated GHG emissions" is the total emission of GHG calculated from the annual travels of participants to EUSAIR governance meetings. The elaboration of this indicator requires two types of data:

- 1. Information on the travels to participate in the meetings (distance and means of transport used);
- 2. GHG emissions produced by each means of transport (e.g. plane, car etc.), i.e. the emissions factors.

Whereas the first type of data is obtained by the stakeholders taking part in the EUSAIR governance, the calculation of the emission factors requires the use of a software and a data set from external sources. The emissions, and consequently the value of this indicator, are expressed in tons of  $CO_2$  equivalent.

#### 2.2.2 Calculation of the baseline

The calculation of the baseline is based on the sample collected through the interviews. Each organiser was asked to communicate the location of the meeting and provide a list of participants with the city of departure and the means of transportation used. However, the data collected were rarely complete. In actual fact, data about the means of transportation used by participants were provided only for one of the meetings analysed; namely the questionnaire concerning the event organised by the FORA/main stakeholders. For this event, "plane", "car", "ferry" and "others" were the options related to the means of transport, where the category "other" was equated to the mode of transport "bus". This choice was justified in two ways: by the adoption of a precautionary principle, since travel by bus has higher GHG emissions per person if compared to trains; and by the fact that the rail network is not well developed in some of the countries analysed. For the other meetings, where this kind of data was missing, cars and planes were considered as means of transport. Adopting once again a precautionary principle, these two means of transport were chosen because they are the two most impactful modes of transport. In this way, we can be sure the greenhouse gas emissions are not underestimated. Furthermore, an assumption was made concerning the use of these two means of transportation. For a distance between 0 kms and 450 kms, the car was considered; while for distances over 450 km the plane was chosen. Only when the distance from the airport to the final destination of the event exceeded 50 kms, a car journey was added in the calculation of greenhouse gas emissions. In this way, the emissions are not underestimated, and the results are more accurate. Finally, in the case of local participants (i.e. who live or work in the same city as the one where the meeting was held) it was assumed that the person travelled a distance of 20 km by car.

The emission factors for the different modes of transport used by participants to reach the meeting venue were collected using the Simapro v9.1.1.1<sup>12</sup> software and adopting the Ecoinvent v3.6<sup>13</sup> dataset. The

<sup>&</sup>lt;sup>12</sup> https://simapro.com/

<sup>&</sup>lt;sup>13</sup> https://ecoinvent.org/the-ecoinvent-database

following table shows the means of transport and their emission factors, expressing the quantity of CO2 equivalent (unit of measurement: kg CO2 eq.) emitted per kilometre.

Table 5 - Emission factor of means of transport

Mean of transport	Airplane	Bus	Car	Electric Car	Ferry	Train	High- Speed Train
Emission factor [kg CO2 eq/km]	0.129	0.100	0.320	0.252	0.004	0.048	0.045

Source: Ecoinvent v3.6

These emissions factors were multiplied by the kilometres covered by each participant to reach the meeting venue. The data on the distance covered by each person was calculated using EcoTransIT<sup>14</sup>, a software programme that calculates distances by different means of transport. When the city of departure of the participants was not reported, it has been replaced by the city of the organisation to which the participant belongs. The distance values were doubled because each journey was considered as a round trip.

The total emissions for each meeting in the sample were calculated using emission factors retrieved from the software Simapro v9.1.1.1<sup>15</sup> adopting the Ecoinvent v3.6 dataset (see Table 5). The following table shows the results.

Meeting*	NATIONAL EMISSION [kgCO₂eq /meeting]	NON- NATIONAL EMISSION [kgCO₂eq /meeting]	TOTAL EMISSION [kgCO₂eq /meeting]	Method applied
TSG - Belgrade, Serbia	58	5 543	5 601	Standard: Only Car (<450km) & Plane (>450km <b>)</b>
TSG - Isola, Slovenia	5 227	0	5 227	Standard: Only Car (<450km) & Plane (>450km <b>)</b>
Governing Board - Podgorica, Montenegro	64	9 561	9 625	Standard: Only Car (<450km) & Plane (>450km <b>)</b>
Governing Board - Brussels, Belgium	32	13 315	13 347	Standard: Only Car (<450km) & Plane (>450km <b>)</b>
Facility point events - Athens, Greece	3 538	3 024	6 562	Standard: Only Car (<450km) & Plane (>450km)
EUSAIR Forum - Catania, Italy *	12 381	24 028	36 409	Standard: Only Car (<450km) & Plane (>450km <b>)</b>
Interreg Adrion - Mostar, Bosnia and Herzegovina	1 012	0	1 012	Standard: Only Car (<450km) & Plane (>450km <b>)</b>
Interreg Adrion - Bologna, Italy	1 728	7 308	9 036	Standard: Only Car (<450km) & Plane (>450km)
Events organized by FORA/main stakeholders - Split, Croatia	5 977	20 745	26 722	Specific: Car, Plane, Ferry and Bus according to the info provided in the survey

#### Table 6 - Emissions of sample meetings

\*One meeting of Interreg Adrion has not been considered due to lack of information on the provenience of participants and their organizational affiliation.

<sup>&</sup>lt;sup>14</sup> https://www.ecotransit.org/en/emissioncalculator/

<sup>&</sup>lt;sup>15</sup> https://simapro.com/

Emission values for each meeting were divided in national and non-national participants.<sup>16</sup> This categorisation was used to calculate the targets and milestones for the result indicator.

In order to obtain a representative value for the emissions of national and non-national participants, an estimate of the average emissions for both has been calculated from the sample. Those values represent the per capita emissions for national and non-national participants. This step has allowed us to find a value that could be multiplied by the estimated participants in the 2018 meetings, thus obtaining the estimate of the total emissions produced by all EUSAIR meetings in 2018 (i.e. baseline). The two averages were obtained dividing (1) the total value of emissions produced by non-national participations by their respective number, and (2) the total value of emissions produced by national participations by their respective number.

Meetings	Emis [kgC	ssions O₂eq]	Number of participants	
	National	Non- national	National	Non- national
TSG - Belgrade, Serbia	58	5 543	9	26
TSG - Isola, Slovenia	5 227	0	39	0
Governing Board - Podgorica, Montenegro	64	9 561	10	43
Governing Board - Brussels, Belgium	32	13 315	5	40
Facility point events - Athens, Greece	3 538	3 024	47	12
EUSAIR Forum - Catania, Italy *	12 381	24 028	83	91
Interreg Adrion - Mostar, Bosnia and Herzegovina	1 012	0	24	0
Interreg Adrion - Bologna, Italy	1 728	7 308	25	32
Events organized by FORA/main stakeholders - Split, Croatia	5 977	20 745	225	147
Total	30 017	83 524	467	391
Weighted average	64	214		

 Table 7 - Average emissions per capita (non-national and national)

\* The EUSAIR Forum meeting held in Catania (Italy) hosted participants from Asia. Given the exceptional nature of their participation, the Asian participants have been considered as outliers.

The total emissions of non-national participants at EUSAIR meetings are 202 tons of  $CO_2$  eq. and are calculated as the product of the non-national average emissions (214 kg of CO2 eq.) and the output indicator "non-national participants", as it is calculated in paragraph 2.3 (945). The same procedure was adopted for the total emissions of national participants, which was calculated as the product of the estimated average of national emissions (64 kg of CO2 eq.) and the output indicator "national participations", as it is calculated in paragraph 2.4 (1 659). The value of non-national emissions is 106 tons

<sup>&</sup>lt;sup>16</sup> The Tirana meeting (Interreg Adrion) has been excluded from calculation due to lack of data. For a quarter of participants, it has not been possible to retrieve information on the place of departure.

of CO2 eq. The value of the direct result indicator in 2018 is the sum of the total non-national and national emission (202+106 = 308 tons of CO2 eq.).

Table 8–Estimation of greenhouse emissions									
	<u>a</u> -Average emission (kg of CO2 eq.)	<u>b</u> -Number of participants	Total emission (tons of CO2 eq.) ( <u>a</u> * <u>b</u> )	Estimated greenhouse emissions(sum of total non-national and national emission)					
National	64	1659	106						
Non national	214	945	202	308					

Table 8–Estimation of areenhouse emissions

#### 2.2.3 Calculation of targets and milestone

To calculate the targets and milestones for the direct result indicator, the internal factor to be considered is the number of on-site meetings, both non-national and national, that are foreseen to decrease over the years. As a second factor, the expected progressive reduction of the emissions in the transport sector (from 2018 to 2050) was considered. This is in line with the targets declared by the EU Commission in the Communication COM (2020) 789 final (Sustainable and Smart Mobility Strategy – putting European transport on track for the future) and the Regulation (EU) 2021/1119 reporting on the framework for achieving climate neutrality.

A reduction of 90% of the GHG emissions by 2050 (compared to 1990) was set as a target by the EU. Looking at the last 30 years, it is worth noting that in spite of an overall reduction in the EU, the GHG emissions produced by the transport sector have increased by 23% from 1990 to 2018.<sup>17</sup> The figure below shows the trend of the emissions produced by the overall transport sector, international aviation, international navigation from 1990 to 2017.

<sup>&</sup>lt;sup>17</sup> The value was calculated on the basis of EEA data (<u>https://www.eea.europa.eu/data-and-maps/data/national-emissions-reported-to-the-unfccc-and-to-the-eu-greenhouse-gas-monitoring-mechanism-17</u>)

#### Figure 2 - Transport emission trend



Source: EEA (https://www.eea.europa.eu/data-and-maps/figures/eu-ghg-emissions-in-the)

The negative performance of the transport sector, in contrast with the reduction of the total national GHG emissions, emerges from the figure. On the one hand, this reflects the close link between economic activity and transport as well as the important role of citizens' mobility. In this regard, it is worth noting that between 1995 and 2018 the number of tonne-kilometres and passenger-kilometres transported in the EU-27 has increased by more than 30%. On the other hand, the trend also shows that the sector remains overly dependent on oil due to insufficient progress in developing technological solutions, in developing and deploying cost-effective clean alternatives, as well as in switching to more sustainable transport modes and behaviours.

The target of reduction of 90% by 2050 compared with 1990 raises the ambition of the existing target of 60% (from 2011 White Paper) and requires significant efforts compared to developments under current trends and policies. The governance of EUSAIR can offer an immediate contribution by changing behaviours, especially by choosing the most sustainable transport solutions available when it comes to reach the meetings' venues.

Based on this, it was decided to use the EU trend of the GHG emissions produced by the transport sector as a proxy for the reduction of the per capita emissions of the non-national and national participations in the meetings devoted to the EUSAIR governance. This choice was made on the assumption that, even if the EUSAIR concerns only five non-EU countries (for the moment), in the long term we can expect convergence on modes of transport and travel behaviours among all EUSAIR stakeholders. More in detail, here is the procedure adopted:

The target of 2050 was recalculated considering the different baselines. The percentage of -90% in EU climate law is compared to 1990, whereas the present system of indicators takes as its baseline the year 2018. Knowing that (as mentioned above) GHG emissions rose between 1990 and 2018, the target of 2050 had to be recalculated. The new value of -92% was obtained.

A linear reduction from 2050 back to 2018 was applied in order to obtain values for 2040 (milestone), 2030 and 2025 (targets). This operation was made knowing that the trend of GHG emissions reduction in the transport sector is expected to be less favourable in this decade (EEA foresaw a reduction of only 6% of GHG transport emissions produced by the transport sector by 2030, if Member States implement the additional measures planned<sup>18</sup>). As mentioned above, it is clear that the factor of reduction of GHG emissions will be confirmed by actual data only if the travel behaviours of EUSAIR stakeholders (higher use of public transport and sustainable transport solutions) will change radically compared to 2018. As such, it is assumed that lack of public transportation infrastructures will be reduced over the decades, where necessary.

The following table shows the targets and the milestone for the result indicator. In each column, the result indicator values (last row) are the sum of two products:

## Trend of GHG emissions reduction in the Transport sector\* Per capita emissions non-national participants\* Non-national participations

## Trend of GHG emissions reduction in the Transport sector\* Per capita emissions non-national participants\* Non-national participations

+

YEAR	2018	2025	2030	2040	2050
Trend of GHG emissions reduction in the Transport sector	0%	-20%	-34%	-63%	-92%**
Per capita emissions non- nationalparticipants [kg CO2eq]	214	171	141	79	17
Per capita emissions national participants [kg CO2eq]	64	51	42	24	5
Non-national participations*	945	760	745	765	780
National participations*	1 659	1 288	1 233	1 203	1 168
Result indicator values [tons CO <sub>2</sub> eq]	308	196	157	89	19

Table 8 - Calculation targets and milestones of result indicator

 $^{st}$  For the national and non-national participations value see next paragraphs 2.3 and 2.4

\*\* As explained in the comment, the percentage of reduction 2050 of 90% compared to 1990 was recalculated considering 2018 as a baseline

Table 8 illustrates the values of the targets and the milestone for the result indicators. The results for those indicators have been calculated using the same approach of the baseline. As an example, the calculation for 2030 is:

- 141 kg CO<sub>2</sub>eq (per capita emissions of non-national participations)\* 745 (number of non-national participations) = 105 tons CO<sub>2</sub>eq
- 42 kg CO<sub>2</sub>eq (per capita emissions of national participations)\*1 233 (number of national participations) = 52 tons CO<sub>2</sub>eq
- 105 tons  $CO_2eq + 52$  tons  $CO_2eq = 157$  tons  $CO_2eq$

<sup>&</sup>lt;sup>18</sup><u>https://www.eea.europa.eu/data-and-maps/indicators/transport-emissions-of-greenhouse-gases-7/assessment-2</u>

Indicator	Unit of	Baseline	Target	Target	Milestone	Target
	measurement	2018	2025	2030	2040	2050
Estimated greenhouse emissions	Tons of CO2 eq./year	308	196	157	89	19

Table 9 - Summary table of Estimated GHG emissions indicator

It is worth noting that an accurate monitoring of the travels related to the EUSAIR governance (as it was carried out for the event organized by FORA/main stakeholders in 2018), i.e. collection of reliable data on the use of the means or transport, will allow to verify the actual achievement of the targets. Such a practice should be encouraged starting from 2022.

Finally, it must be remembered that the transportation sector is going to change dramatically in the upcoming years. Technological advancements may potentially cause a drastic alteration of the emission factors that are currently used to calculate the greenhouse gas emissions of the various means of transport used by the participants. For this reason, it is strongly recommended to periodically review the emission factors and recalculate the result indicator targets for the upcoming years. This reviewing process can be done every two years in order to have updated and reliable data that can produce more accurate values for the result indicator.

#### 2.3 Output indicator: Non-national participations (in presence)

#### 2.3.1 Description of the indicator

The indicator "Non-national participations" reports the number of yearly on-site participants in EUSAIR meetings that came from a country other than the one where the meeting took place. As the indicator counts participations, the same person could have participated in more than one meeting.

Given that the indicator is intended to measure single in presence participations, it concerns both fully in presence meetings and hybrid meetings, where some participants meet face to face and others are connected from their own venues. As explained in paragraph 2.6, this typology of meetings is expected to be the most common in the future meetings related to the EUSAIR governance.

#### 2.3.2 Calculation of the baseline

For the calculation of the baseline, the value of the non-national participations collected from the sample category is used. It is composed of 492 participants who were present in a meeting and came from a country other than the one where the meeting took place. The lists refer exclusively to meetings that took place in 2018. In Table 10 the number of participants for each typology is reported, the weight (see Part 1) and the estimated total of non-national participations per category (calculated as the product of the two previous values). The last row of the table reports the sum of participants for each category of the

sample and all meetings. This last value (945) corresponds to the estimated non-national participants in 2018 meetings.

NON-NATIONAL PARTICIPATIONS IN 2018	A-SAMPLE	B-WEIGHT	TOTAL BY CATEGORY (A*B)
TSG	27	6	162
GOVERNING BOARD	94	1	94
FACILITY POINT EVENTS	37	3	111
EUSAIR FORUM	120	1	120
INTERREG ADRION	61	5	305
EVENTS ORGANIZED BY FORA/MAIN STAKEHOLDERS	153	1	153
TOTAL	492	-	945

Table 10 - Non-national participations

#### 2.3.3 Calculation of targets and the milestone

To set up targets and the milestone, few assumptions have been made:

- The possibility that new countries join EUSAIR in the future;
- The increasing interest in the macro regional strategy;
- The possibility to participate in the meetings remotely.

These aspects have been taken into consideration to formulate the quantitative hypothesis that the number of non-national participations will increase by a cumulative 1% per year, having 2018 as the baseline year.

This upward trend is combined with the progressive increase from 2025 onwards of the online participation in the meetings (see output indicator: Remote participations). Thus, the gross value is reduced by the percentage of remote participation.

Non-national participations	2018	2025	2030	2040	2050		
Non-national participations	945	1013	1065	1176	1299		
(with remote participations)							
Percentage of participations from remote	-	25%	30%	35%	40%		
Non-national participations	945	760	745	765	780		
(without remote participations)							

Table 11 - Targets and milestone calculation of non-national participations

As illustrated in Table 11, the number of non-national participations (with remote participations) increases to almost 1300 in 2050. The last row is calculated by subtracting the percentage of participation from

remote. While the overall (on-site + online) participation of non-national increases, the number of those attending in presence remains below 800 (780 in 2050).

Indicator	Unit of measuremen t	Baseline 2018	Target 2025	Target 2030	Mileston e 2040	Target 2050
Non-national participations	Number of participations	945	760	745	765	780

 Table 12 - Summary table non-national participations indicator

#### 2.4 Output indicator: National participations (in presence)

#### 2.4.1 Description of the indicator

The indicator "National participations" reports the number of yearly on-site participation in EUSAIR meetings of participants who came from the same country as the meeting took place. As the indicator counts participations, the same person could have participated in more than one meeting.

Given that the indicator is intended to measure single in presence participations, it concerns both fully in presence meetings and hybrid meetings, where some participants meet face to face and others are connected from their own venues. As explained in paragraph 2.6, this typology of meetings is expected to be the most common in the future meetings related to the EUSAIR governance.

#### 2.4.2 Calculation of the baseline

Like the previous indicator, the value of national participation is based on the lists collected from the sample category. The sample is composed of 627 participants from the country where the meeting took place. Table 13 reports the number of participations from each typology, the weight and the estimated total of non-national participations by category (calculated as the product of two previous values). The last row of the table reports the sum of participants for each category of the sample and for all meetings. In total, the value of national participations in 2018 is 1659.

NATIONAL PARTICIPATIONS IN 2018	A-SAMPLE	B-WEIGHT	TOTAL BY CATEGORY (A*B)
TSG	50	6	300
GOVERNING BOARD	15	1	15
FACILITY POINT EVENTS	55	3	165
EUSAIR Forum	94	1	94
INTERREG ADRION	168	5	840
EVENTS ORGANIZED BY FORA/MAIN STAKEHOLDERS	245	1	245
TOTAL	627	-	1659

Table 13 - National participants

#### 2.4.3 Calculation of targets and the milestone

For setting the targets and the milestone, few assumptions have been made:

- Interest in EUSAIR in the national context will grow.
- The possibility to participate in meetings remotely.

The first hypothesis considers a more moderate growth in overall participation if compared to nonnational participation. The growth can be expressed as an increase of 0.5% per year in national participation from 2018.

This upward trend should include the possibility of participating remotely in the event. Thus, the gross value is reduced by the percentage of remote participants (for the scenario of remote participants, see the Output indicator: Remote participations (online).

National participations	2018	2025	2030	2040	2050
National participations (with remote participations)	1659	1718	1761	1851	1946
Percentage of participations from remote	-	25%	30%	35%	40%
National participations (without remote participations)	1659	1288	1233	1203	1168

#### Table 14 - Targets and milestone calculation of national participations

As illustrated in Table 14, the number of national participations (with remote participations) increases to more than 1 900 in 2050. The last row is calculated by subtracting the percentage of participation from remote. While the overall (in presence + online) participation of nationals increases, the number of those attending in presence remains below 1 200 (1 168 in 2050).

#### Table 15 - Summary table national participations indicator

Indicator	Unit of measuremen t	Baseline 2018	Target 2025	Target 2030	Mileston e 2040	Target 2050
National participations	Number of participants	1659	1288	1233	1203	1168

#### 2.5 Output indicator: Remote participations (online)

#### 2.5.1 Description of the indicator

The indicator "Remote participations" reports the number of yearly participations from remote (online) to the EUSAIR meetings.

Given that the indicator is intended to measure single online participations, it concerns both fully online meetings and hybrid meetings, where some participants meet face to face and others are connected from their own venues. As explained in paragraph 2.6, this typology of meetings is expected to be the most common in the future meetings related to the EUSAIR governance.

#### 2.5.2 Calculation of the baseline

In the 2018 sample no cases of remote participation were detected. Consequently, the baseline for this indicator is zero.

#### 2.5.3 Calculation of targets and the milestone

During the COVID-19 pandemic, experiments with remote participation in EUSAIR meetings were done. In line with this experience, a scenario with an increasing number of remote participations is proposed. In general terms, an increasing percentage of remote participants is expected due to the evolution of ICT towards more immersive remote participation solutions. More specifically, for larger events the remote participation foreseen is higher because the interactions between participants is lower. In the following table, the second row shows the sum of national and non-national participants, according to their respective scenarios (see previous two paragraphs). The second row shows the percentages according to an increasing scenario, starting from 25% in 2025 and increasing by 5% at each target or step. The last row shows the final results obtained with the percentage applied to the second row.

	2018	2025	2030	2040	2050
Total participations	2604	2048	1978	1968	1947
(national and non-national)	2007	2010	10/0	1000	2017
Percentage of participants	_	25%	30%	35%	40%
in remote		2370	30/0	3370	1070
Remote participations	0	683	848	1060	1298

#### Table 16 - Targets and milestone calculation of remote participants

The value of remote participation increases until reaching 1298 in 2050. The values at Table 17 contain the gradual increase in the number of remote participation to EUSAIR meetings.

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Indicator	Unit of measuremen t	Baseline 2018	Target 2025	Target 2030	Mileston e 2040	Target 2050
Remote participations (online)	Number of participants	0	683	848	1060	1298

#### 2.6 Output indicator: Number of meetings

#### 2.6.1 Description of the indicator

The indicator "Number of meetings" reports the yearly number of EUSAIR meetings, regardless of their typology. Meetings can be:

- Fully in presence, meaning that all participants reach the venue to meet face to face;
- Fully online, meaning that all participants connect online from their own venue;
- **Hybrid**, meaning that some participants reach the venue to meet face to face, and others connect online from their own venue.

Considering the complexity and variety that characterises the EUSAIR governance system, it is expected that the exigency to connect from remote to the meetings will be regularly expressed by some participants. This is the reason why it is expected that the hybrid modality will be largely adopted in the coming years and decades.

#### 2.6.2 Calculation of the baseline

The indicator on the number of events reports the actual number of events that took place in 2018. The number of meetings by each category is reported in the last column in the following table and classified by category. In 2018, 34 meetings were organised to ensure the governance of EUSAIR.

Meetings in 2018	Number of meetings
TSG	12
Governing Board	2
Facility point events	3
EUSAIR Forum	1
Interreg Adrion	15
Events organized by FORA/main	1
stakeholders	
TOTAL	34

Table 18 - Number of meetings

#### 2.6.3 Calculation of targets and the milestone

The number of meetings is sufficient and balanced to ensure the governance of EUSAIR. This number of events can be kept stable over the coming decades. As shown in the following table, the value of the targets and the milestone remains the same i.e. 34.

Table 19 - Resume table for Number of events / meetings

Indicator	Unit of measuremen t	Baseline 2018	Target 2025	Target 2030	Mileston e 2040	Target 2050
Number of meetings	Number of meetings	34	34	34	34	34

It is worth noting that the indicator number of meetings is not directly linked to the result indicator in the system proposed. This is because only travels are considered to produce greenhouse gas emissions. If the production of greenhouse gas emissions through other activities related to the meetings (e.g. meals, local tours etc.) will start to be taken into account, this indicator will have to be connected to the result indicator.

#### 2.7 Output indicator: Total number of days of meetings

#### 2.7.1 Description of the indicator

The indicator "Total number of days of meetings" reports the duration of all meetings organised yearly to ensure EUSAIR governance.

#### 2.7.2 Calculation of the baseline

The table below shows the duration of the meetings organised in 2018 per category of meetings. The 34 organised meetings had a total duration of 51 days.

Meetings in 2018	Number of meetings	Days
TSG	12	22
Governing Board	2	4
Facility point events	3	5
EUSAIR Forum	1	2
Interreg Adrion	15	15
Events organized by FORA/main stakeholders	1	3
ΤΟΤΑΙ	34	51

Table 20 - Number of days

#### 2.7.3 Calculation of targets and milestone

The duration of the meetings organised in 2018 seems sufficient and balanced to ensure EUSAIR governance in the following decades. Thus, the number of days can be kept stable in the coming decades. As shown in the following table, the value adopted for the targets and the milestone remains the same i.e. 51.

Table 21 - Summary table for Total number of days of events/ meetings

Indicator	Unit of measuremen t	Baseline 2018	Target 2025	Target 2030	Mileston e 2040	Target 2050
Total number of days of events/ meetings	Number of days	51	51	51	51	51

It is worth noting that the indicator total number of days of meetings is not directly linked to the result indicator in the system proposed. This is because only travels are considered to produce greenhouse gas emissions. If the production of greenhouse gas emissions through other activities related to the meetings (e.g. meals, local tours etc.) will start to be taken into account, this indicator will have to be connected to the result indicator.

## **2.8** Process indicator: Number of procedures according to EU GPP published and implemented

#### 2.8.1 Description of the indicator

The indicator on the number of procedures according to EU GPP published and implemented measures how many times during the year the GPP rules have been adopted in PP practices for the organisation of EUSAIR meetings.

#### Scope of the indicator

In regards to the process indicators, two GPP Criteria, "Food Catering services and vending machines" and "Cleaning products and services", were selected as they are in accordance with the organisation of all kinds of events. For this reason, these two GPP Criteria, in line with the process indicator targets, need to be considered every time an event is organised.

According to the Commission Staff Working Document "Food Catering services and vending machines" (SWD (2019) 366 Final), the GPP criteria are applicable to direct procurement of food by public authorities and the procurement of catering services, either using in-house resources or facilities or outsourcing in full or in part through contract catering firms.

According to the Commission Staff Working Document on "Cleaning products and services" (SWD (2018) 443 Final), the GPP criteria are applicable to the following activities:

- environmentally conscious routine indoor professional cleaning services performed in areas that include offices, sanitary facilities, such as toilets and sinks, and other publicly accessible areas;
- the cleaning of glass surfaces that can be reached without the use of specialised equipment or machines.

With reference to the organization of EUSAIR events, the GPP Criteria specifically apply to operations that take place at the venue of the event, and related places and buildings where the other EUSAIR meeting activities take place.

The scope could be revised in the future according to new potential GPP criteria published at EU level.

#### Ratio of the proposed indicator

Since the introduction of the Integrated product Policy, the EU clearly stated the central role of Public Bodies in the achievement of sustainable production and consumption patterns within the EU Member States.

Specifically, with the Communication n.397 of 2008 on the Sustainable Consumption and Production and Sustainable Industrial Policy Action Plan, the European Commission presented the framework for Green Public Procurement procedures to be adopted in public tenders all over Europe. The intention of this document was setting the ground for the definition of GPP targets based on the level of best performing Member States and providing model tender specifications. In the same year with communication n.400 on Public procurement for a better environment, the European Commission set targets for the diffusion of such procedures: by 2010, 50% of all public tendering procedures should have been green, where 'green' means compliant with endorsed common core EU GPP criteria.

Considering this EU legal and policy framework on the voluntary application of GPP criteria, and the Directive 2014/24/EU Public Procurement and related new regulations set to ensure greater inclusion of common societal goals, such as environmental protection, in the procurement process, the adoption of GPP criteria is becoming more and more compelling.

With reference to those EUSAIR countries that are part of the European Union, it is fundamental to consider their adoption of GPP criteria compared to their own GPP National Action Plan. In all of these countries there are specific regulations for the mandatory adoption of GPP criteria and specific targets that range from 20% to 100% of procedures performed according to GPP rules:

1) Croatia: application of GPP criteria for many Public services with an objective of 50% of all PP procedures to include GPP Criteria within 2020; specific obligations set out in article 6 of the Directive 2012/27/EU on energy efficiency are transposed in the national Ordinance which lays down that central government must purchase only products, services and buildings with high energy efficiency performance. 2)Greece: mandatory application of GPP criteria for many Public services with different implementation targets ranging from 20% to 80% of PP to include GPP criteria; the average GPP procedures to the 50% of all PP procedures within 2023; Greece has set mandatory and non-mandatory criteria for different product groups;

3) Italy: mandatory application of GPP procedures in 100% of applicable PP procedures. Under art. 34 of the Legislative Decree 50/2016 on public procurement and concessions, as amended by art. 23 of the Legislative Decree 56/2017, the introduction of at least the technical specifications and the contract clauses of the Minimum Environmental Criteria is obligatory in tender documents also for procurements below the threshold amounts.

4)Slovenia: mandatory application of GPP criteria for many public services with an objective of 50% of all PP procedures to include GPP Criteria within 2021; GPP requirements are regulated by the national Decree on Green Public Procurement (Official Gazette of the Republic of Slovenia, No. 51/17, 64/19 and 121/21).

Considering the content of the above cited GPP National Action Plans, and the guideline set by the EU in its very first communication on GPP procedures, it was established that the EU countries shall adopt the GPP criteria and guidelines for every expense of an event.

With reference to non-EU countries, there is no direct legal framework to support the adoption of GPP for their public expenses. However, as previously stated, it appears essential to adopt these procedures in order to promote sustainable development of the EUSAIR region. For this reason, a hypothesis is made that non-EU countries will arrange a progressive adoption of GPP procedures.

#### 2.8.2 Calculation of the baseline

In the scope of the interviews conducted among 10 organisers of EUSAIR meetings, 2 organisers answered positively the question "How many of these<sup>19</sup> procedures have been published (started) and how many have been actually executed and finalised according to the rules of Green Public Procurement (GPP)?". No specific PP procedure has been settled by the Governing Board, but goods and services were purchased from a catering contractor of the European Commission, in line with the GPP criteria. For the Interreg Adrion event, a PP procedure in accordance with GPP rules was concluded.

In both cases, the published procedure was successfully implemented.

Events in 2018	Number of procedures according to EU GPP published	Number of procedures according to EU GPP criteria successfully implemented	Weight	Total (equal for both)
TSG	0	0	6	0
Governing Board	1	1	1	1
Facility point events	0	0	3	0
EUSAIR Forum	0	0	1	0
Interreg Adrion	1	1	5	5
Events organized by FORA/main stakeholders	0	0	1	0
TOTAL	2	2	-	6

Table 22 - Number of procedures according to EU GPP published and successfully implemented

In total, it is assumed that 6 procedures according to published EU GPP were successfully implemented in 2018. This number is calculated by multiplying the received answers by the respective weights.

#### 2.8.3 Calculation of targets and the milestone

Since in 2018 34 meetings were organised (60% in EU countries and 40% in non-EU countries) and meetings are not expected to increase, it is assumed that the total number of procedures that will be put in place to buy services or goods belonging to the categories "Food Catering services and vending machines" and "Cleaning products and services" is 68.

As explained above, all procedures published and implemented in EU countries are expected to be carried out according to GPP principles: 60% of all procedures = 41. This will be valid in 2025 and will be maintained in the subsequent years. In 2025, however, a hypothesis is made that 50% of the organisers

<sup>&</sup>lt;sup>19</sup>Refers to GPP "Food, Catering services and vending machines" and "Cleaning products and services".

of events located in non-EU countries will follow GPP principles: 40% of all procedures\*50%=13. As a result, the whole number or GPP procedures published and implemented in 2025 shall be 54.

As it is expected that all procedures published and implemented by EU and non-EU countries will be done according to GPP in 2030, the target value for the process indicator is 68 for 2030. Once achieved, the target value shall be maintained through 2040 till 2050 in line with the EU Net-Zero Carbon strategy.

Indicator	Unit of measuremen t	Baseline 2018	Target 2025	Target 2030	Mileston e 2040	Target 2050
Number of procedures according to EU GPP published and implemented	Number of procedures	6	54	68	68	68

Table 23 - Summary table for Number of procedures according to EU GPP published and implemented

#### 2.9 Input indicator: Expenses for GPP/ total expenses for PP

#### 2.9.1 Description of the indicator

The indicator "Expenses for GPP/total expenses for PP" measures the ratio between the amount spent according to GPP rules and the whole amount spent (i.e. euro spent on GPP-compliant procedures vs. euro spent on total procedures). It shows the percentage of expenditure on green public procurement incurred during the year as a proportion of total expenditure on all procurement. Both values shall refer to the same year. The calculation requires relating two quantities expressed in euro to obtain a comparable figure throughout the monitoring period. This involves conversions from currencies other than the euro.

#### 2.9.2 Calculation of the baseline

Respondents reported total expenditure for PP and expenditure for GPP, if they followed the GPP criteria. In the following table the values for each category of meetings are reported.

Events in 2018	Total expenses for PP (€)	Total expenses for GPP (€)	Expenses for GPP / Total expenses for PP (%)
TSG	2100	0	0%
Governing Board	8910	3650	41%
Facility point events	12878	0	0%
EUSAIR Forum	42084	0	0%
Interreg Adrion	15407	2340	15%
Events organized by FORA/main stakeholders	91701	0	0%
TOTAL	173081	5990	7%*

Table 24 - Expenses for GPP / Total expenses for PP

\*This percentage is not calculated as the ratio between the totals of columns but as the weighted average of the percentage shown in the same column.

The total expenditure for PP in our sample is  $173.081,00 \in$  and for the two meetings that followed the GPP criteria, the total expenditure for GPP is  $5.990,00 \in$ . The last column reports the percentage of GPP expenditure in relation to total PP expenditure for each category. The value of the indicator in our sample is 3.5%, but the value for all EUSAIR meetings is calculated as the weighted average (the weights are the same as reported in the previous paragraph). The resultant baseline is 7% and it represents the percentage of GPP expenses in 2018.

#### 2.9.3 Calculation of targets and milestone

The calculation of targets and the milestone is based on the assumption that the public procurement procedures implemented to organise the events are of comparable value, with no procedure deviating significantly from the average.

The target for 2025 is calculated considering that 54 procurement procedures out of 68 will be implemented in accordance with GPP = 79%.

As all procedures are expected to be implemented in accordance with GPP in 2030, 2040 and 2050, these targets and the milestone are equal to 100%.

Indicator	Unit of measuremen t	Baseline 2018	Target 2025	Target 2030	Mileston e 2040	Target 2050
Expenses on GPP/ total expenses on PP	Percentage	7%	<b>79%</b>	100%	100%	100%

Table 25 - Summary table for Expenses on GPP/ total expenses on PP

## 3. Overview of the proposed targets and milestones

The proposed system of indicators aims both at measuring the impact of the behaviours in the context of the EUSAIR governance (result and output indicators) and at identifying possible avenues of progress in the adoption of sound policies and administrative practices, i.e. green public procurement (process and input indicators). Specifically, the quantification proposed in the previous chapter indicates the potential capacity of the EUSAIR governance to contribute to the 2030 and 2050 climate targets of the European Union.

Looking at the result indicator, which measures the GHG emissions generated by the travels related to the EUSAIR governance activities in the period 2018-2050, it appears that in 2025 and 2030 the EUSAIR governance will "perform" much better than what expected by the "benchmark", i.e. the GHG emissions generated in the macroregional area (context indicator). As shown in the table below, the trend of GHG emissions reduction concerning the result indicator is significantly stronger than that foreseen for the context indicator. This shows the capacity of the EUSAIR governance system to fully align with the EU strategic framework. In the previous chapter it was underlined that such a good performance does not depend on an overall improvement in the transport sector, but shall be linked to the change of behaviours by the EUSAIR stakeholders, i.e. a reasonable participation in on-site meetings combined with the choice of more sustainable means of transportation determines a significant decrease (measured at result level) of GHG emissions generated by the travels related to the EUSAIR governance activities from 2018 to 2050.

The system is based on the full awareness that the level of the result indicator is not crucial to measure the actual contribution of the EUSAIR governance to the EU climate targets. Looking at the absolute figures it clearly appears that the number of and the way in which the EUSAIR meetings are organised changes only marginally the overall production of GHG emissions in the area. However, such a level is important because it demonstrates the actual commitment of the stakeholders when their own behaviours are concerned.

Looking at the impact of the choices made by the EUSAIR stakeholders, the level of process and input indicators appears more significant. Process indicators are meant to complement the information on the way meetings are organised. This could have a significant multiplier effect ending to "bring the Green Deal" to the region. According to the proposed quantification of targets and milestone, both indicators will rise dramatically in 2025 and will reach and maintain their peak in 2030, 2040 and 2050. If initially only given services and products (areas of food and cleaning) could be purchased according to green procedures, progressively all public purchases related to EUSAIR meetings shall follow green criteria. They could concern products necessary for the meeting organisation, such as printed materials or gifts. They could also be related to the venue where a meeting is organised, implying the selection of providers ensuring proper waste management, efficient use of energy and use of energy from renewable sources. More importantly, the organisation of the EUSAIR meetings is intended as a testing ground where green practices in public procurement can be experimented. Especially in case of non-EU countries, where compulsory adoption of green procurement procedures is not foreseen in the respective national

regulatory frameworks, the adoption of green procurement procedures to organise EUSAIR meetings could generate a multiplier effect within the public administrations involved. The adoption of green procurement criteria, initially experimented in procedures aimed at the organisation of the EUSAIR meetings, could become standard practice within the administrations. This would in turn give a more substantial contribution to the achievement of EU environmental targets in the macroregional area. However, for this scenario to come true, it appears necessary to develop a capacity building programme, particularly for non-EU countries.

The table below provides a comprehensive overview of the baselines, targets and milestones for all indicators already justified and shown in the previous part of the report.

	Indicators	Baseline	Target	Target	Milestone	Target
Туре	Name	2018	2025	2030	2040	2050
Contout	Estimated GHG emissions (trend)		-3%	-7%	-55%	-93%
Context	Estimated GHG emissions (values)	6.85	6.65	6.34	3.08	0.48
Pocult	Estimated GHG emissions (trend)		-36%	-49%	-71%	-94%
Result	Estimated GHG emissions (values)	308	196	- 157		19
Output	Non-national participations (values)	945	760	745	765	780
Output	National participations (values)	1 659	1 288	1 233	1 203	1 168
Output	Remote participations (values)	0	683	848	1 060	1 298
Output	Number of meetings	34	34	34	34	34
Output	Total number of days of meetings (values)	51	51	51	51	51
Process	Number of procedures according to EU GPP published and implemented (values)	6	54	68	68	68
Input	Expenses on GPP/ total expenses on PP (values)	7%	79%	100%	100%	100%

Table 26 - Overall quantification of indicators

### Recommendations

This final section highlights some key findings and recommendations emerging from the proposed indicators quantification:

- Regarding process indicators, it is worth noting that non-EU stakeholders are expected to
  progressively adopt green procurement practices in less than a decade (50% by 2025; and 100%
  by 2030). In order to achieve these process indicator targets for EU non-EU countries, decisive
  and coordinated capacity-building activities should be taken to ensure the preparedness of all
  stakeholders.
- Current modalities of transnational transport used by participants to EUSAIR governance activities, mainly choice of air travel solutions even when not strictly necessary, are not compatible with the targets set for the reduction of greenhouse emissions in the area. A change in the behaviour and the travel habits of EUSAIR stakeholders is essential, meaning that more informed choices on the potential impacts related to the transportation mode should be performed towards lower environmental impact solutions.
- In order to achieve the targets of the output indicators, it is necessary for EUSAIR stakeholders to agree on a long-term strategy that limits the number of face-to-face participations, without reducing the level of interaction that seems necessary for sound decision making in a transnational context. They will have to identify which meetings can be transformed into permanent online sessions (e.g. EUSAIR Forum) and which should retain predominantly in presence (e.g. Governing Board), assuming that the hybrid approach will be largely adopted. Guidelines shall be proposed and agreed to achieve balanced solutions where the overall number and duration of meetings should not increase, with only a limited increase in the overall number of participation allowed. Furthermore, annual monitoring will be necessary to keep track of the practices actually adopted. Assuming that levels of on-site participation to EUSAIR meetings will return towards pre-COVID-19 levels in the near future, it is recommended to increase the practice of online participation (from 25% of all participations in 2025 up to 40% in 2050). From 2025 onwards, larger meetings where face-to-face interaction is less important, should be organised online, thus capitalizing on the experience gained during the period of pandemic restrictions. More immersive modalities of communication are likely to emerge and facilitate online interaction, thus reducing the experiential gap with on-site modalities of communication. Nevertheless, face-to-face exchanges should continue to be considered as essential to build mutual trust in a macroregional framework. In fact, in line with the transnational nature of the macro-regional strategy, an increase in the number of on-site participations of non-nationals, can and should be foreseen.
- It is essential to implement a structured system of data collection and monitoring starting from the year 2022. Looking at the output level, data collection tools should include a standardised registration form (to be filled in by participants), aimed at gathering data on output and results indicators; and a questionnaire (to be filled in by each meeting's organizers), aimed at gathering data on process and input indicators. The data collected should be monitored and analyzed regularly in order to monitor progress. In doing so, it is important to review the emission factors and recalculate the result indicator targets every two years, given that the transportation sector

is expected to change dramatically in the upcoming years. Technological advancements may potentially cause a drastic alteration of the emission factors that are currently used to calculate the greenhouse gas emissions of the various means of transport used by the participants. As far as the process and input indicators are concerned, monitoring should be focused in the initial phase on the public procurement procedures put in place to organise EUSAIR meetings. However, to measure the possible multiplier effect on the overall public procurement practices adopted by the EUSAIR stakeholders, the scope of the monitoring could be progressively widened.

## Annex

#### 1. Context indicator

															Target 2050			*	*
	Baseline 2018 Target 2025							Target 2030 compared reference year			Milestone 2040			compared			Referen ce year	Reference year	
															1990*			2005	1990
Name	Total GHG emissio ns	Popula tion (in thousa nd)	Ton s of CO2 per capi ta	%	Popula tion (in thousa nd)	Tons of CO2 per capi ta	Reg. (EU) 2018/ 842 opt.1. 1 and INDC	Refe renc e year	Total GHG emissio n	Popul ation (in thous and)	Tons of CO2 per capita	Interp olate value	Popula tion (in thousa nd)	Tons of CO2 per capita	-95% (all)	Popula tion (in thousa nd)	Tons of CO2 per capi ta	Total GHG emission s	Total GHG emissions
AL	10 080	2 866	3.52	-7%	2 798	3.01	-12%	2016	8 602	2 748	3.13	4 018	2 591	1.55	566	2 377	0.24	9 720*	11 310
BA	27 190	3 324	8.18	-29%	3 212	4.60	-33%	1990	20 134	3 127	6.44	9 313	2 923	3.19	1 507	2 685	0.56	20 820	30 140
HR	22 550	4 088	5.52	-13%	3 939	6.17	-16%	2005	23 428	3 824	6.13	10 997	3 567	3.08	1 435	3 304	0.43	27 890	28 690
GR	84 750	10 733	7.9	-18%	10 437	9.78	-22%	2005	96 650	10 196	9.48	45 941	9 755	4.71	4 768	9 236	0.52	123 910	95 350
IT	399 600	60 422	6.61	-34%	58 886	6.24	-43%	2005	319 126	57 974	5.50	147 282	56 028	2.63	24 563	53 040	0.46	559 870	491 250
ME	3 800	622	6.11	-31%	621	4.65	-35%	1990	1 677	618	2.71	774	602	1.29	129	581	0.22	4 160	2 580
MK	10 510	2 083	5.05	-45%	2 074	3.29	-51%	1990	6 850	2 051	3.34	3 076	1 967	1.56	699	1 857	0.38	12 330	13 980
RS	62 600	6 983	8.97	-9%	6 714	9.18	-10%	1990	73 991	6 495	11.39	34 945	5 998	5.83	4 102	5 507	0.74	67 420	82 030
SI	17 170	2 074	8.28	-22%	2 091	7.23	-28%	2005	14 033	2 072	6.77	6 572	2 011	3.27	888	1 943	0.46	19 490	17 760
MACR O	638 250	93 194	6.85		90 772	6.65			564 490	89 105	6.34	262 918	85 442	3.08	38 655	80 530	0.48	844 990	773 090

#### 2. Result indicator

The data sheets of the result indicator are available at the following link: <u>https://drive.google.com/drive/folders/1G3OsDCxPoWqR8epRQe94nTn0IHp264eQ?usp=sharing</u>