

# Results of the stakeholder survey on the 2016 EEA Report on Climate Change, Impacts and Vulnerability

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## Introduction

EEA has considerable freedom in deciding the scope and content of the 2016 EEA Report on climate change, impacts and vulnerability (CCIV), taking into account recent developments in policy (such as the adoption of the EU Adaptation Strategy in 2013) and in science (such as the publication of the IPCC Fifth Assessment Report in 2014). As part of the planning of the 2016 EEA CCIV report, ACC4 conducted a stakeholder survey in September 2014. The survey was agreed with DG CLIMA and SMT, and it was announced at the Eionet meeting on climate change impacts, vulnerability and adaptation in June 2014.

The main goal of the survey was gathering feedback from stakeholders on their satisfaction with the previous 2012 CCIV report as well as on potential changes in the scope, content, and process of the planned 2016 CCIV report. Additionally, the survey served to remind a wide range of stakeholders of EEA's current and planned activities in this area.

The survey centred around 16 multiple-choice questions, a few of which had further sub-categories. In addition, respondents could provide free text comments to each question. The full survey is included in Annex I to this document.

## Target audience and responses

Invitations for the survey were sent to a diverse range of stakeholders, including various Commission services, NRCs on climate change impacts, vulnerability and adaptation, NFPs, EEA's contact points on adaptation in national ministries (largely from the former Adaptation Steering Group), and members of the Advisory Board of the 2012 CCIV report.

About 200 individuals in total received an invitation to this survey, whereby some of them (such as the NFPs) received it in copy rather than as direct addressee. 33 valid responses were provided within the response period of three weeks. The response rate is not particularly high, but the number of respondents is still sufficient to draw some tentative conclusions.

The online survey was hosted in the public part of the Eionet Forum, thus allowing all stakeholders to fill it in easily even if they did not have an Eionet account. All participants self-identified with their name and affiliation. From the 33 responses, 3 came from the Commission (DG ENV and DG SANCO), 3 from other EU bodies (ECDC, Committee of the Regions), 1 from an international organization (Alpine Convention), 16 from national governments (ministries, environmental agencies and other institutions), 2 from subnational governments (Belgium and Bosnia and Herzegovina), 1 from a non-governmental organisation (Climate Action Network), 6 from academic institutions, and 1 from a consultancy. Due to the small number of respondents from most categories of host institutions, the analysis below cannot systematically distinguish responses according to the type of host institution. However, in one case a distinction is made between public institutions focussing on policy-making and implementation and academic institutions serving mainly as information providers.

DG CLIMA and JRC did not respond to this survey. However, EEA is in direct contact with DG CLIMA regarding the scope, content and timing of the 2016 CCIV report, and with JRC on its scope and the mode of cooperation.

## Use of the 2012 EEA CCIV report

30 out of 33 respondents stated that they used the 2012 CCIV report for **raising awareness** of climate change and its impacts among policy-makers and the general public. Specific comments mentioned among others presentations to policy-makers, updating the national climate website, news briefs, and the National Communication to the UNFCCC.

25 out of 33 respondents stated that they used the 2012 CCIV report for **planning detailed climate change impact, vulnerability or risk assessments or for defining national adaptation policies**. This rate is very high, considering that several of the other respondents are actually not involved with these activities. Specific comments mentioned drafting of national and international (Alpine) adaptation strategies.

20 out of 33 respondents stated that they already used the 2012 CCIV report for **developing indicators** in their own organisation, and 3 mentioned they plan doing so in the future. Once again, this rate is very high, considering that several of the other respondents are not involved with these activities.

21 out of 33 respondents stated that they have consulted the EEA **climate indicators online** since publication of the printed report. 2 of them mentioned specifically their interest in using the most recent data available for presentations and for policy development.

Overall, the 2012 CCIV report was used by the overwhelming majority of stakeholders surveyed. It served different purposes, depending on the specific area of responsibility of a stakeholder and on the state of adaptation policy development in the host institution or country.

### EEA response

The majority of stakeholders were aware of the indicators online and some mentioned that they specifically checked for updated information online. The interest in updated indicators is expected to increase due to the explicit mentioning of indicator updates in the recently introduced EEA newsletter. As a result, “intermediate” updates of key indicators in the event of new and relevant information are considered helpful. At the same time, a significant minority of stakeholders used exclusively the printed report, suggesting that a comprehensive printed report is still relevant despite the increased use of online information channels.

## Content of the 2012 EEA CCIV report

Respondents were invited to rate the **usefulness** of each of the 8 substantial parts of the report:

- Executive Summary
- Technical Summary
- 1. Introduction
- 2. Changes in the climate system (indicator-based)
- 3. Climate impacts on environmental systems (indicator-based)
- 4. Climate impacts on socio-economic systems and health (indicator-based)
- 5. Vulnerability to climate change (not indicator-based)
- 6. Indicator and data needs

The rating applied a 4 point scale from *very useful* to *not useful*; the answer *don't know* was also possible. The aggregated usefulness<sup>1</sup> of the Technical Summary and the Executive Summary was rated as 87% and 86%, respectively. The corresponding ratings for the other chapters were 70% for the introductory chapter, between 77% and 81% for the four thematic chapters (2–5), and 73% for the

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<sup>1</sup> A usefulness of 100% refers to all respondents rating the report as *very useful* whereas a usefulness of 0% refers to all respondents rating the report as *not useful*.

concluding chapter on indicator and data needs. Out of the 264 responses in total (33 respondents times 8 chapters), the lowest rating *not useful* was given only once (for the introductory chapter by an NGO representative). Individual respondents expressed slight preferences for one or the other of the four thematic chapters, but the aggregate ratings for all of them were very similar. One respondent noted that the concluding chapter was “deviant” from the rest of the report, but the large majority of respondents still considered this chapter to be *useful* or *very useful*.

While Chapters 2 to 4 focussed on indicators, Chapters 3 and 4 included as well information on climate-sensitive risks that was not suitable for presentation as EEA indicator. A further set of questions addressed specifically the usefulness of the non-indicator-based information in these chapters. The aggregated usefulness of this type of information was rated between 67% and 71%, which is somewhat lower than the 73% to 81% rating given to the whole chapter. Nevertheless, the majority of respondents still felt that this information was *useful* or *very useful*, and only one respondent saw it as *not useful*.

Respondents were also invited to rate the **length** of each chapter on a 3 point scale as *appropriate*, *too long* or *too short*. The length of the Executive Summary and Technical Summary was rated as *appropriate* by all respondents. The percentage of *appropriate* ratings for the other chapters was also very high, between 83% and 90%. The few respondents who expressed that some chapters were either *too long* or *too short* generally suggested that Chapters 1, 2 and 3 could have been shorter whereas Chapters 5 and 6 could have been longer. The response for Chapter 6 is somewhat surprising, given that 2 out of 4 respondents who suggested that this chapter could have been longer had stated before that it was only *somewhat useful*.

### *EEA response*

The vast majority of respondents considered most of the information in the 2012 CCIV report as *useful* or *very useful*. Information on vulnerability to climate change that is not based on indicators is also considered *useful* or *very useful* by almost all respondents. This type of information should thus be kept in some way, or even expanded. The introduction might be shortened and/or parts of it might be moved to an annex. The chapters on the climate system and on environmental systems might be shortened somewhat, but not drastically. No clear conclusion can be drawn for the chapter on indicator and data needs.

## Quality of the 2012 EEA CCIV report

Respondents were invited to rate the **scientific quality** of the 2012 EEA CCIV report on a 4 point scale from *very satisfied* to *not satisfied*. 11 out of 33 respondents were *very satisfied*, 21 were *satisfied* and 1 was *somewhat satisfied*; no-one answered *not satisfied*. This results in an overall satisfaction of 77%.

The chair of the EEA Scientific Committee, who had been in the Advisory Board of the 2012 EEA CCIV report, rated her satisfaction with the quality of the report as *satisfied*, adding the comment “*because you always want to leave room for improvement*”. This comment suggests that some of the respondents who did not give the highest rating might have done so for strategic reasons in order to prevent potential complacency in the future.

The answer *somewhat satisfied* was given once, by a representative of a national environment agency, who commented “*There were some issues with the scientific data that had to be corrected*”. After publication of the EEA report, this respondent (together with colleagues from the same agency) had pointed out that EU level projections for one indicator were not fully consistent with projections made by her institution at the national level (presumably with more detailed models and additional data). We acknowledged the differences and established contact with the colleague from JRC who had provided the projections in the EEA report. However, we did not see a reason for “correcting” any data. Different models unavoidably produce somewhat different projections for the future, and it is not generally possible to tell in advance which ones are better (i.e. less wrong). Interestingly, this respondent was the only one who answered *don't know* to all questions regarding the usefulness and the length of the report.

The **comprehensibility of the language** of the 2012 EEA CCIV report was rated as *appropriate* by 32 out of 33 respondents and as *too simplistic* by one of them (a scientist who had been an author of the report).

The **comprehensibility of the graphics** in the 2012 EEA CCIV report was rated as *appropriate* by 32 out of 33 respondents; 1 person responded *don't know*. Two respondents commented that individual graphics could be improved.

### EEA response

The responses suggest there are no substantial issues with either the quality or the comprehensibility of the report. However, further improvement and harmonization is possible in specific cases.

## Content of the 2016 EEA CCIV report

27 out of 33 respondents confirmed that the **objective** of the 2016 EEA CCIV report should largely remain the same as for the 2012 report, 4 respondents disagreed and 2 had *no opinion*. Specific comments will be discussed in the context of the next question.

Respondents were also asked which topics might be **added** to or **dropped** from the 2016 CCIV report. 14 respondents made suggestions for adding/expanding a topic. These suggestions are presented in the table below together with the affiliation of the person(s) making the suggestion. The upper part contains the broad suggestions whereas the lower part contains the more specific suggestions. In contrast, there was only one specific suggestion for dropping/shortening a part of the report, suggesting that the chapter on changes in the climate system might be more concise in 2016 compared to 2012.

Topic to be added	Institution(s)	Topic to be expanded	Institution(s)
Implications for Europe of climate impacts outside Europe	MoE (NL), SMHI (SE)	Assessment of vulnerability	DG ENV, ETC-CCA
Adaptation indicators	PBL (NL), NEA (NO)	Socio-economic impacts	MoE (IT)
Urban (adaptation) indicators	Alterra (NL)	Vulnerability of cities and urban areas	Alterra (NL)
Synergies of mitigation and adaptation policies	UBA (DE)		
Links to climate change adaptation and disaster risk management	Consultant (UK)		
Costs of policy measures, structure of policies, data availability at local level	Institute of Public Health (MK)		
Cross-sectoral impacts of an electricity blackout	MoE (NL)	Mountain areas, in particular the Alps	Alpine Convention
Animal health (in particular bees), plant health (pests and diseases)	DG SANCO		
Landslides, cultural heritage	ISPRA (IT)		
Regional sea-level projections <sup>2</sup>	UBA (DE)		

Two respondents suggested including information on the implications for Europe of climate change impacts experienced outside Europe. Two respondents suggested the inclusion of adaptation indicators. Two respondents suggested the 2016 CCIV report should include a comprehensive European-level vulnerability assessment. However, they did not provide specific suggestions on its purpose or on the methods and data to be used. Three respondents suggested adding topics directly related to policy development. One respondent (who happens to be the ETC-CCA task leader of the forthcoming EEA urban vulnerability map book) suggested significantly expanding information on urban vulnerability to climate change.

<sup>2</sup> This request has already been accommodated by the update of CLIM012 in September 2014.

## *EEA response*

One of the specific requests for adding a topic has already been implemented in the context of the 2014 update of that particular indicator (on global and European sea level rise). The other suggestions should be considered in the planning of the 2016 EEA CCIV report, considering the overall length of the report and applying established criteria for EEA indicators (including data availability, policy relevance, and sensitivity to climate change).

EEA does not have specific experience on **climate change impacts experienced outside Europe**, but the 2016 CCIV report might summarize information available from other sources, including the PESETA II GAP project by JRC. **Adaptation indicators** (i.e. indicators monitoring the implementation of adaptation) are currently under development in a few member countries, but no such indicators have been agreed at the European level. Furthermore, there is resistance from EEA member countries regarding mandatory indicator-based adaptation monitoring. In this situation it seems best that this scientifically and politically challenging topic continues to be addressed in a separate EEA report. Various projects have produced some kind of **European-level vulnerability assessment**, including PESETA II, ESPON Climate, ClimateCost and ClimSave. Each of these projects had much more resources available than what EEA can devote in the context of this report. Furthermore, it is important to note that any large-scale climate change vulnerability assessment requires important normative decisions, either explicitly or implicitly, which critically determine the outcome. The best way for EEA to make a difference in this area might be to provide an overview of the available assessments and to conduct a critical review. The links between the 2016 EEA CCIV report and a planned EEA Report on **urban vulnerability** and adaptation is another important topic for discussion. It may indeed be possible to use the urban vulnerability map book as the basis for a discussion of urban vulnerability issues in the 2016 CCIV report.

## **Format of the 2016 EEA CCIV report**

Respondents were asked whether the 2016 EEA CCIV report should include all indicator assessments (as in the previous 2004, 2008 and 2012 CCIV reports) or whether it should be limited to a synthesis (whereby indicators continue to be published online). 17 out of 33 respondents are in favour of publishing the **full assessment**, 13 prefer publishing a synthesis only, and 3 have no opinion. Hence there is a significant, but not an overwhelming majority in favour of publishing the full assessment. If we focus on the key target audience of the EEA report from the public sector (by excluding those from academic institutions and consultancies), 16 out of 26 remaining respondents are in favour of publishing the full assessment, 8 prefer publishing a synthesis only, and 2 have no opinion. While many academic scientists seem prepared to use information published online, a clear majority of those respondents involved in policy-making (still) prefers the full assessment to be published in a printed report.

An analysis using Google Analytics (see Annex II) shows that the number of unique page views (on the EEA webpage) of those indicators included in the 2012 CCIV report during the first year after its publication is broadly comparable to the print run of that report, and that the average time a reader remained on the indicator page is about 100 seconds. Assuming that the average recipient of the printed report looked briefly at three indicators (admittedly a wild guess!), the printed report would still have a considerable larger outreach than the indicators published online.

## *EEA response*

The available data on the use and effectiveness of the printed report versus the indicators published online is admittedly scarce. Nevertheless, considering all available data, it would seem difficult to justify limiting the 2016 CCIV report to a synthesis, in which case the indicators would be available online only.

## **Production process of the 2016 EEA CCIV report**

The table below shows those respondents who showed interest in becoming a **member of the Advisory Board** of the 2016 CCIV report. In addition, two persons volunteered as expert reviewer or proof reader (Mike Harley, UK and Johan Bogaert, BE).

<b>Name</b>	<b>Institution</b>	<b>Country</b>	<b>Previous member</b>
Jos G Timmerman	Alterra	NL	No
Jelle van Minnen, Willem Ligtvoet	PBL	NL	Yes
Thomas Voigt, Inke Schauser	UBA	DE	Yes
Pavel Šťastný	Hydrometeorological Institute	SK	No
Åsa Sjöström	SMHI	SE	No
Dragan Gjorgjev	Institute of Public Health	MK	No
Luisa Piarantonelli	MoE	IT	No
Kathryn Humphrey	Adaptation Subcommittee	UK	No
Jacques Delsalle	DG ENV	EU	Yes
Jan Semenza	ECDC	EU	Yes
Mike Harley	Consultant	(UK)	No
Gilles Chomat	Alpine Convention	—	No

The only suggestion for changing the production process of the 2016 CCIV report was a request for extending the period for Eionet review. In 2012 the review period was 5 weeks long, but it was during the summer holiday period. Hence, it may be assumed that the length of the review period was less critical than the timing within the calendar year.

### *EEA response*

The total number of respondents interested in becoming a member of the Advisory Board exceeds the number of positions foreseen for countries. Therefore further discussion about the composition of the Advisory Board is needed. The Eionet review should be scheduled outside the summer holiday period if possible.

# Annex I: Stakeholder survey

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The questions below refer both to the paper-based 2012 EEA Report on Climate Change, Impacts and Vulnerability in Europe and to the web-based indicators underlying that report.

## *Organisation*

1. What is your name?

(Free text)

2. Which organization are you representing?

(Free text)

Which kind of organization are you representing?

(European Commission/ Other EU body/ UN body or other international organization/ National government/ Subnational government (including environment agency)/ Non-governmental organization/ Academic or research organization/ “Your choice”)

## *Use of EEA reports and indicators on Climate Change, Impacts and Vulnerability*

3. Have you made use of the 2012 EEA report to raise awareness of climate change and its impacts among policy-makers and/or the general public?

(Yes/No/n.a. + Comments)

4. Have you made use of the recent EEA reports to help define the scope and content of national and/or sectoral impact, vulnerability and risk assessments?

(Yes/No/n.a. + Comments)

5. Are you developing and implementing indicators in your country/organization that are based on or similar to the indicators in the EEA reports?

(Yes/No/n.a. + Comments)

6. Have you used the EEA climate change indicators published on the EEA website after 2012 (e.g. to check for updated information)?

(Yes/ No + Comments)

## *Content and scope of the 2012 EEA report*

7. How useful did you find the following parts of the 2012 EEA report?

- a. Executive Summary
- b. Technical Summary
- c. Introduction (purpose, scope, background, indicators, scenarios, uncertainty, vulnerability)
- d. Changes in the climate system
- e. Climate impacts on environmental systems
- f. Climate impacts on socio-economic systems and health
- g. Vulnerability to climate change
- h. Indicator and data needs

(Very useful/Useful/Somewhat useful/Not useful + Comments)

8. How appropriate did you find the length of the following parts of the 2012 EEA report?
- Executive Summary
  - Technical Summary
  - Introduction (purpose, scope, background, indicators, scenarios, uncertainty, vulnerability)
  - Changes in the climate system
  - Climate impacts on environmental systems
  - Climate impacts on socio-economic systems and health
  - Vulnerability to climate change
  - Indicator and data needs

(Too short/Appropriate/Too long + Comments)

9. The 2012 EEA report included some information on observed and projected impacts of climate change that was not suitable for presentation as EEA indicators (e.g. due to limited data availability). How useful did you find those pieces of information?
- Information in the chapter *Climate impacts on environmental systems* (e.g. on coastal erosion and on freshwater ecosystems and water quality)
  - Information in the chapter *Climate impacts on socio-economic systems and health* (e.g. on fisheries and aquaculture, on electricity production and consumption, on transport services and infrastructure, and on tourism)
  - Information from EU projects in the chapter on *Vulnerability to climate change* (e.g. from ClimWatAdapt, ESPON Climate, JRC PESETA and ClimateCost)

(Very useful/Useful/Somewhat useful/Not useful)

### *Scientific quality and accessibility of the 2012 EEA report*

10. How satisfied are you with the scientific quality of the content of the 2012 EEA report?

(Very satisfied/Satisfied/Somewhat satisfied/Not satisfied + Comments)

11. How accessible do you find the language of the 2012 EEA report?

(Too complicated/Appropriate/Too simplistic + Comments)

12. How accessible do you find the graphics (diagrams and maps) of the 2012 EEA report?

(Too complicated/Appropriate/Too simplistic + Comments)

### *Content and scope of the planned 2016 EEA report*

13. Should the objectives of the 2016 report remain (more or less) the same as for the 2012 report?

(Yes/No/No opinion + Comments)

14. Are there any particular topics or indicators not included in the 2012 EEA report that you would like to propose for consideration in the 2016 report?

(Comments)

15. Are there any particular topics or indicators included in the 2012 EEA report that you find no longer relevant for the 2016 report?

(Comments)

16. Which information about indicators should be included in the planned 2016 report?  
[Explanation: The 2012 report included the full assessment of all underlying indicators. Another option would be including only a synthesis in the printed report whereas the indicators are published online only.]

(Full assessment/ Synthesis only + Comments)

#### *Preparation of the planned 2016 EEA Report*

17. EEA intends to include in the Advisory Board of the 2016 EEA report two or three countries that have experiences with climate change assessments. Are you (or another expert in your country/organization) interested in taking an active role in the development of the 2016 EEA report by becoming a member of the foreseen Advisory Board?

(Yes/No/n.a. + Comments)

18. Do you propose any other changes in the development process of the planned 2016 EEA report, compared to the 2012 report?

(Comments)

# Annex II: Google Analytics page views of EEA indicators on climate change

OSE provided page view statistics of (all) EEA indicators for the first year after publication of the 2012 CCIV report. The table below shows the statistics for all indicators included in the 2012 CCIV report and additionally for two climate change-related SEBI indicators. All indicators are sorted by the number of page views in decreasing order. CSI012 appears twice because it was updated during the time period covered by the statistics was CSI012.

The large “popularity” of *CSI012 – Global and European temperature*, the (soon-to-be-CSI) *CLIM012 – Global and European sea level rise*, and *CLIM037 – Vector-borne-diseases*, were more or less expected. Personally I was surprised by the high popularity of *SEBI010 – Invasive alien species* and *CLIM047 – Heating degree days*.

Most of the “low popularity” indicators were not surprising to me, with the possible exception of *CLIM009 – Greenland ice sheet* and of *CLIM004 – Extreme precipitation*. However, most stakeholders are presumably not interested in the fate of the Greenland ice sheet as such, but in the implications of its melting on global sea level, which is covered in detail in the very popular indicator *CLIM012*. I hope that the already completed and further planned changes to *CLIM004* will increase not only its relevance to decision-makers, but also its popularity.

CLIM code	Page	Page views	Unique Page views	Time on page	Entrances	Bounce Rate	% Exit
<b>CSI012</b>	/global-and-european-temperature/global-and-european-temperature-assessment-5	2828	1913	104	1131	58%	42%
<b>CSI012</b>	/global-and-european-temperature/global-and-european-temperature-assessment-6	2716	1664	109	405	55%	26%
<b>SEBI010</b>	/invasive-alien-species-in-europe/invasive-alien-species-in-europe	1389	831	113	559	51%	37%
<b>012</b>	/sea-level-rise-1/assessment	1218	789	111	595	59%	46%
<b>047</b>	/heating-degree-days-1/assessment	1027	634	99	289	40%	26%
<b>034</b>	/forest-growth-1/assessment	904	601	94	194	57%	26%
<b>037</b>	/vector-borne-diseases-1/assessment	880	540	107	370	55%	39%
<b>006</b>	/air-pollution-by-ozone-1/assessment	806	515	98	160	48%	27%
<b>002</b>	/european-precipitation-1/assessment	756	499	113	220	42%	29%
<b>044</b>	/ocean-heat-content/assessment	709	516	121	282	65%	41%
<b>028</b>	/soil-erosion-by-water-1/assessment	691	421	76	124	53%	21%
<b>024</b>	/distribution-of-animal-species-1/assessment	682	416	98	281	51%	39%
<b>035</b>	/forest-fire-danger-1/assessment	644	397	117	242	54%	37%
<b>008</b>	/snow-cover-1/assessment	616	436	100	271	56%	46%
<b>046</b>	/floods-and-health/assessment	614	417	118	124	51%	28%
<b>039</b>	/direct-losses-from-weather-disasters-1/assessment	593	415	137	181	50%	34%
<b>030</b>	/growing-season-for-agricultural-crops-1/assessment	562	388	100	218	70%	45%

013	/sea-surface-temperature-1/assessment	556	362	93	130	42%	23%
017	/river-floods-1/assessment	552	337	87	133	49%	26%
036	/heat-and-health-1/assessment	551	388	129	169	57%	33%
033	/water-requirement-1/assessment	541	363	105	187	59%	34%
031	/timing-of-the-cycle-of-1/assessment	537	373	60	57	58%	18%
<b>SEBIO11</b>	/impact-of-climate-change-on/impact-of-climate-change-on	475	339	119	196	70%	47%
043	/ocean-acidification/assessment	413	267	129	118	53%	30%
032	/crop-yield-variability-1/assessment	402	272	122	124	52%	35%
016	/river-flow-1/assessment	380	240	106	101	45%	30%
010	/arctic-sea-ice-1/assessment	349	240	92	146	62%	41%
027	/soil-organic-carbon-1/assessment	337	226	130	82	57%	31%
045	/storms-and-storm-surges-in-europe-1/assessment	328	224	110	120	64%	35%
018	/river-flow-drought-1/assessment	326	197	123	82	44%	29%
007	/glaciers-1/assessment	302	182	136	98	50%	33%
022	/distribution-of-plant-species-1/assessment	294	212	63	84	61%	32%
019	/water-temperature-1/assessment	281	200	118	104	63%	36%
029	/water-retention-1/assessment	268	192	106	79	56%	32%
005	/storms/assessment	265	173	72	71	46%	29%
004	/precipitation-extremes-in-europe-1/assessment	261	177	103	50	58%	31%
025	/animal-phenology-1/assessment	231	157	116	83	67%	42%
009	/greenland-ice-sheet-1/assessment	199	128	83	58	50%	37%
015	/northward-movement-of-marine-species-1/assessment	177	116	106	43	70%	31%
023	/plant-phenology-1/assessment	163	117	114	52	73%	37%
020	/lake-and-river-ice-cover-1/assessment	158	112	77	55	67%	35%
011	/mountain-permafrost-1/assessment	150	111	75	43	63%	31%
014	/marine-phenology-1/assessment	136	94	99	44	66%	32%
026	/species-ecosystem-relationship-1/assessment	135	94	82	37	73%	30%

### EEA response

The large popularity of *SEBIO10 – Invasive alien species* gives further support to the ongoing discussion with NSV1 requesting an update of this indicator.

The large popularity of *CLIM047 – Heating degree days* (which was first introduced in the 2012 CCIV report) gives further support to the discussion with Eurostat (who provide the underlying data) requesting that their indicator database be expanded in order to include also cooling degree days.

It would be inappropriate to use these statistics (alone) as an argument for the deletion of indicators, unless there are important additional arguments. However, it would seem appropriate using these data as one criterion among others for decisions on the distribution of resources (e.g. print pages, person days, update frequency) across different indicators. Having said that, one possible candidate for deletion is *CLIM026 – Species interactions*. This indicator hardly qualified for inclusion in the 2012 CCIV report due to insufficient data availability, and it turns out to be the least “popular” indicator.