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1. ANNEX 1 – SWOT 2007-2013 AND SUMMARY SWOT 2014-2020

In the on-going evaluation for the North Sea Region Programme it is recommended that a continuous update of the SWOT be made throughout the seven year lifecycle of the programme.

It was also recognised that the current projects in the programme are an important and relevant source of information and expertise for a continuous verification of the SWOT and the socio-economic framework.

As part of the online survey for the on-going evaluation, projects were asked to point out the opportunities and threats which they thought would most determine the development of the North Sea Region. In this list it is clear that some of the opportunities and threats identified are in keeping with those in the programme's existing SWOT. However, new or emerging trends that have become more important since the development of the existing Interreg IVB programme are also visible. These opportunities (+) and threats (-) determining the development of the North Sea Region within the next 5 to 10 years have been compared against the 11 new thematic objectives as proposed by the European Commission. The full list can be found in Annex 4. Examples include:

- + Encouraging innovation & business growth in sectors in which the NSR can be competitive internationally; (2) developing links/markets with growing economies; (3) responding to the financial crisis; (4) adapting to climate change; (5) promoting sustainable transport
- + Competing internationally by means of sustainable and high quality economic sectors
- Constrained economic activity as a result of the financial crisis and sovereign debt crisis and the impacts these things have had on employment and growth opportunities
- Scarce resources for drinking water. Economic and societal impact of flooding. Societal and economical impact of natural resources such as fishery, minerals, energy.

It should be stressed that these represent the views of a small group of project managers and are not necessarily representative. Furthermore, the fact that an issue has been flagged at the project level does not mean that it can or should become a topic for future cooperation. On the contrary, most of the main elements of the IVB SWOT seem to remain true as has been confirmed by programme stakeholders on a number of occasions. The question therefore to ask is whether any of the new issues mentioned (and indeed others not yet considered) have a potential impact that is significant and widespread enough across the whole programme area to merit inclusion in a new SWOT. This question was addressed at the second strategic meeting for the programme's internal stakeholders ('Billund 2'). During this event, workshops were held to discuss the status quo and the future relevance of the SWOT analysis, as published in the OP, for the work of the programme. The discussions were arranged in four workshops sessions, each of them focusing on one of the programme priorities.

Each workshop started with a short presentation of the SWOT analysis of the respective priority. Where possible, examples of already approved projects from the programme were given in order to illustrate which topics of the SWOT had already been covered. The discussions focused on three central questions:

• Is the SWOT analysis still relevant?

- Are there any new "hot topics" that should be added to the thematic scope of the programme?
- Are there any topics in the existing SWOT that should be prioritised in the future?

Discussions not only referred to the current programming period, but also to the perspectives for Interreg V.

Results of the workshops

Priority 1

Overall, the SWOT is still relevant. It was highlighted that innovation has proved to be a very successful priority, which has attracted many good quality projects. The reasons for this might be that innovation can be applied in almost all thematic fields giving good flexibility to project developers. Innovation is of course also a key element in most regional and national policies, and the need for innovation has been a much discussed theme at every level throughout the programme's lifetime. Innovation should therefore play a central role also in the coming programme.

Many topics of the SWOT have already been addressed by projects though the fact that there were no projects in area of intervention 1.4 at the time of the workshop led to a discussion about the possibilities to encourage applications within this field. One project was subsequently approved but the difficulty of attracting applications under this area of intervention remains worthy of reflection.

Potential additional topics discussed in the workshop were

- The financial crisis
- Electric vehicles (and the development of innovative technologies in this context)
- Changing attitudes towards demographic change: no threat, but an opportunity
- Climate change
- Ethical entrepreneurship

Another potential topic added by the plenary was eco-efficient solutions, which have recently become highly relevant, especially in the light of the financial crisis.

Priority 2

In this priority, all areas of intervention had already been covered and 98% of the funding had been allocated. The SWOT analysis was still relevant and did not need changing. The topicality and importance of the environment priority has been highlighted repeatedly (and is again a conclusion of the present study). At the time, considering the fact that most of the funds had been allocated, the idea even came up to reinforce "environment" as a cross-cutting theme relevant for all priorities.

There was a general concern that, against the background of the financial crisis, environmental issues might be neglected because they cost money. This threat should be turned into an opportunity by focusing on the environment as an economic factor – boosting the eco-efficient economy as a means to tackle the financial crisis. This conclusion remains very relevant.

Priority 3

The SWOT analysis was still valid and there was no fundamental need for any changes. Thus, the discussion was rather about fine-tuning the topics. One reason for the initial lack of popularity of priority 3 seemed to be that the full potential of the priority was not realised by project developers. Therefore there was a need to communicate the broad range of possible topics and to make clear that the maritime focus of the priority did not mean that other forms of transport were excluded. The idea of a transport vision for 2050 was discussed in order to secure a wider, long-term perspective for this priority. It is also worth noting that Priority 3 was one of the two big priorities in terms of funds available. This might therefore be adjusted in future.

New topics to explore at the time included:

- Traffic safety
- Eco-driving
- Public transport
- Environmentally friendly fuels
- Energy logistics and
- Transportation management

Most of these themes were subsequently addressed by one or more applications.

Priority 4

The SWOT analysis was still valid and many issues had already been covered by approved projects. The plenary tackled the question of how to deal with rural decline and whether it should be combated or accepted as a fact.

Important topics that were worth exploring included

- Education, training and self-employment
- Empowerment of youth
- Demographic change
- Migration, also in an international context
- Climate change and energy efficiency.

It was regarded as problematic that project applications in priority 4 often have a spatial instead of a thematic approach. The value of a thematic approach should therefore be highlighted.

Conclusions from Billund II

During the Billund II event there was general consensus that the SWOT analysis of the programme was still relevant and should not be changed. Participants had several ideas for topics that could be added or highlighted, also with regard to the coming programming period. These issues are still open for discussion and should be incorporated in the current debate. It would however seem that for the next programming period, the existing SWOT is a good starting point from which to identify North Sea Region issues relevant to building the new programme. Refinements and additions might of course be necessary as well as the inclusion of issues that have arisen or grown in importance since the development of the current IVB programme.

For example, various sources highlight as relevant challenges demographic change, constrained economic activity as a result of the financial crisis, and the related employment and growth issues. Transnational cooperation could help to further support and facilitate innovation and business growth. Finally, from an environmental stand point climate change and its impacts remain in focus including the issues of flooding and resource shortages. Whether these situations substantially change the thematic discussion is open to question: They are perhaps more reminders of the urgent need to identify themes that will have the maximum positive effective on delivering more sustainable growth to the region.

Other SWOTs

There are many other sources from which one might identify new items for the programme's SWOT analysis. For example, Europe 2020 identifies a number of strengths and weaknesses for the European Union as a whole, which apply to varying extents to the North Sea Region.

Strengths/opportunities from Europe 2020 Talented workforce Powerful technological and industrial base Internal market Chance to actively profile NSR as an innovative region (c.f. Vancouver) Vibrant services sector High quality agricultural sector (possibly even more so due to climate change) World's biggest trading bloc Strong maritime tradition North Sea economies are amongst the most innovative and developed in the world

Weaknesses/threats from Europe 2020 Globalisation Pressure on resources Ageing – EU population will begin to shrink in 2013/2014. Number of people aged over 60 is increasing by 2 million every year (EU-wide) Levels of investment in R&D and innovation too low Insufficient use of ICT Reluctance of some parts of societies to embrace ICT Barriers to market access Less dynamic business environment

While these again highlight most of the main areas for concern as perceived by the European Commission, they also include issues which are of lesser importance for the North Sea Region, or which are already addressed in the IVB SWOT if not always explicitly. The potential for adding further themes and sub-themes is huge but will not fundamentally alter the overall picture of the region. This in turns emphasises the danger of allowing the SWOT to simply become an accumulation of themes and serves as a reminder that the programme must concentrate its resources and focus where there is an added value to cooperation and the most benefit for the North Sea Region can be achieved.

2. INNOVATION SWOT 2007-2013

| STRENGTHS | WEAKNESSES | OPPORTUNITIES | THREATS |
|--|---|---|---|
| | | | |
| Well developed business support infrastructure Largely good availability and use of new technologies supporting performance of public administrations and institutions NSR is one of the world leaders in use of ICT and production of ICT equipment ICT literacy generally well developed in parts of NSR High level of application of new technologies to underpin governmental effectiveness(administrations and institutions) All countries around the North Sea possess advanced | A large number of SMEs in the NSR have the greatest difficulties in being innovative Suboptimal exchange of knowledge between businesses and research centres such as universities Skills level and human resource shortages in some peripheral and rural regions | Existing technologies and clusters as basis the diffusion of innovation Proximity between rural communities in the southern and western part of the NSR, allowing for clustering and networking between institutions Growing competence in developing Regional Innovation Strategies and identifying upcoming key factors for regional competitiveness through innovation The specific characteristics of SMEs (locally rooted, individual-led, independent) present a major opportunity for an overall increase of welfare in the NSR Potential to benefit from globalisation due to highly developed businesses and availability of existing advanced ICT technologies and services in wide but more central parts of the NSR Existence of modern environmental technologies | Decreasing human resources, knowledge and infrastructure in the sparsely populated, peripheral and remote areas of the North Sea Region Decreasing innovative potential in less favoured regions due to unfavourable trends in the population structure (ageing and migration) Increasing regional disparities inside the NSR countries Decreasing employment levels as a consequence of competition with new markets outside Europe Emigration of skilled labour force to (metropolitan) areas |
| innovation systems, including relevant policies, strategies and investment plans • Existing clusters in NSR | Insufficient level of expenditure in R&D outside large metropolitan areas | providing opportunities for their wider application and use, which can lead to expanded industries and more jobs Complementarity with existing innovation regional and | outside the NSR Rising energy prices hindering economic consolidation in general, and creation of SMEs |
| (knowledge and sectoral, e.g. energy, engineering) with a strong industrial presence, | Suboptimal use of ICT by businesses and citizens | A strategies and other programmes such as 7th Framework Programme High potential to develop more targeted and integrated | in particular |

| research base and key markets | policies for SME's | |
|----------------------------------|---|--|
| Generally well educated | Incentives of European funding programmes for | |
| workforce | cooperation across borders, sectors and institutions | |
| High amount of available fossil | (private sector, academia, government and public | |
| fuels and alternative energy | sector organisations) | |
| sources in wide parts of the NSR | Increasing labour force potential especially in larger | |
| High education levels in NSR | urban areas due to significant levels of international | |
| | immigration (especially UK, G, SE) | |
| | Continued funding from the EC Research Framework | |
| | Progammes to make more use of R&D networks, e.g. | |
| | by stronger participation of actors not yet sufficiently | |
| | involved (e.g. SMEs) | |
| | • Rising energy prices as an opportunity to drive the | |
| | development and wider application of new | |
| | technologies and renewable energy | |
| | Existing development potential of specific sectors in | |
| | many rural or peripheral areas of the NSR | |

3. SUMMARY INNOVATION SWOT FOR NSR 2014-2020

| Strengths | Weaknesses |
|--|--|
| Very strong innovation performance | Insufficient commercialization of innovative ideas |
| Strong capacity in a number of key sectors with | Need for increased knowledge exchange between |
| a very strong innovation potential | businesses and knowledge institutions |
| | Need for increased innovation in SMEs |
| Opportunities | Threats |
| Learning on innovation support between | Lack of funding |
| countries and regions in the programme area | Lack of willingness to take risks |
| Sharing of research facilities and findings in a | Fragmented approaches |
| joint North Sea innovation system | Stagnation |

| Unresolved societal challenges (e.g. climate | |
|--|--|
| change, aging population, alternative fuels) | |
| provide strong impetus for innovation | |

4. SWOT 2007-2013 ENVIRONMENTAL PROTECTION AND MANAGEMENT

| STRENGTHS | WEAKNESSES | OPPORTUNITIES | THREATS |
|---|--|---|--|
| Good environmental awareness in the society NSR countries leaders in environmental technologies and in particular in energy technologies Experience in development of alternative and renewable energy sources Large number of attractive natural landscapes, habitats and ecosystems (e.g. wetlands, rich and varied coastline) The North Sea possesses rich common resources, i.e. fresh and groundwater, fish, oil, gas Existing wealth of experience and established practices in the field of water management in many countries around the North Sea | Unsustainable energy production practices, esp. regarding the energy efficiency of the economies Uncoordinated efforts in the preservation and restoration of landscapes/ destroyed landscapes and ecosystems; Vulnerable coastal and lakeside habitats (also to climate change) High maritime risks, esp. oil pollution, due to high maritime traffic volumes and current practices for transportation and handling of oil Vulnerability to coastal flooding, esp. in the estuarine areas of the NS High degree of environmental and habitat degradation | High degree of coverage of national strategies and plans on integrated and concerted management and planning of coastal zones and the North Sea itself Growing awareness of the vulnerability and sensitivity of the environment, as manifested in e.g. public attention for damage from ship accidents or changing fish populations High environmental quality as basis for expanding sustainable tourism in the NSR Existing anticipation and prevention strategies for risk minimisation due to effects of climate change Building on environmental awareness to adopt energy efficiency practices in lifestyles Rising energy price levels as a driver for development and application of renewable and environmental technologies Build on existing experience and knowledge to advance research into renewable and environmental technologies for optimisation of processes Existing pilots on marine spatial planning | Environmental problems associated with the growth in road and sea transport Competing land and sea uses exerting pressure on the environment Increase in extreme weather conditions, e.g. sea and wind surges and high water levels High costs of introducing environmental technologies could prevent their use Loss of land and green field sites; growing demand for land use Depletion of natural resources Economic development needs overriding other interests and efforts in safeguarding sustainable development of the North Sea Region Extensive groundwater abstraction and salt intrusion into the groundwater systems Continuing threats to maritime |

| Increased pollution to sea (sea and land based activities), soil (urban, industry and agriculture) and fresh water courses | as a basis for broader application and model to reconcile multiple sea-uses and integration with terrestrial planning and ICZM Existing transnational initiatives are a basis to further develop environmental technologies into mainstream technologies Using the existing technology and knowledge base for environmental innovations in all sectors Optimisation of existing processes, e.g. carbon sequestration, through transnational networks Existing experience in the field of water management as a source for transnational knowledge transfer, improvement and wider application | safety due to accidents |
|--|---|--|
|--|---|--|

5. SUMMARY ENVIRONMENT SWOT FOR NSR 2014-2020

| Strengths | Weaknesses |
|--|--|
| NSR countries leaders in environmental | Unsustainable energy and industrial practices |
| technologies | High number of degraded habitats and |
| Number and range of natural landscapes and | ecosystems |
| resources | Many vulnerable coastal and waterside areas |
| | High risk of maritime accidents |
| Opportunities | Threats |
| High degree of awareness and support for | Short-term economic development needs override |
| environmental action including social enterprise | more holistic approaches |
| Strong experience and knowledge for | Lack of knowledge |
| developing renewable and environmental | Accident / natural disaster |
| technologies | |
| Strong economic potential of green economy | |

| STRENGTHS | WEAKNESSES | OPPORTUNITIES | THREATS |
|--|---|---|---|
| Shared transport priorities around the NS as a basis for transnational co-operation, i.e. intermodality, interoperability, harnessing transport demand, strengthening existing infrastructure High awareness for maritime policy needs (well researched subject) Advanced TEN-T Network, including main roads Biggest container ports in the world with gateway function (hubs) Strong seaward transport tradition and large share of international sea transport generating economic growth | Lack of effective intermodal systems (sea-road, sea-rail and road-rail at all levels) Incomplete or ineffective transnational transport corridors integrating different transport modes, which are not environmentally friendly nor energy-efficient High dependency on road-based transport as a means of cargo transport Limited accessibility of remote areas due to poor integration into national and international transport networks Insufficient adaptation to the demands for maritime safety Under-used potential of ICT for application in logistics and corridor | Strong political support for maritime policy co-operation Existing national investment plans (e.g. Germany) supporting transnational objectives i.e. intermodal inland as well as port-hinterland connections High potential to utilise existent advanced technologies for wider use of environmentally friendly and energy efficient fuels, e.g. bio ethanol in different modes of transport Existing TEN-T as opportunity to improve accessibility of secondary hubs through feeder systems Awareness of potentials for short sea shipping (SSS) in the NSR could form the basis for common transnational strategies of sea transport Growing potential to reduce need for travel through wider use of IT Existing functional interaction across large parts of the NSR open up opportunities for the development of transport and development corridors and drive intelligent intermodal transport systems (road, rail, waterborne, air) | Heavy increase in road transport due to continuous lack of rail corridors with priority for transportation of goods Limited growth in SSS due to market developments, i.e. increasing size of vessels, which potentially pose pressure on smaller ports to become peripheral due to limited capacity |

6. TRANSPORT SWOT FOR THE 2007-2013 NORTH SEA REGION PROGRAMME

7. SUMMARY TRANSPORT SWOT FOR NSR 2014-2020¹

| Strengths | Weaknesses |
|---|---|
| Strong transport infrastructure, service- | Conventionally fuelled road transport and |
| providers, knowledge and willingness to | associated problems remain dominant |
| improve in the North Sea Region | |
| Opportunities | Threats |
| Many elements for increased multimodal | Lack of funding and knowledge |
| transport are already in place | Continued supply of cheap conventional fuels |
| Using existing infrastructure better | may lead to a timid introduction of sustainable |
| Strong research capacity on transport issues | alternatives |
| Strong business interest and significant market | Remoter regions may fall further behind if they |
| opportunities | suffer a relative fall in accessibility compared to |
| | core regions ² |

¹ Inputs are also drawn from North Sea Region 2020 Strategy (North Sea Commission), Maritime Transport and Future Policies – Perspectives from the North Sea Region (Final report of the Maritime Transport Cluster project)

² 'Remote' and 'core' in the sense of European core-periphery patterns

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|----------------|------|------|------|------|------|------|
| Belgium | 460 | 510 | 475 | 473 | 515 | 485 |
| Denmark | 311 | 344 | 311 | 313 | 334 | 314 |
| Germany | 3329 | 3641 | 3307 | 3312 | 3607 | 3401 |
| Netherlands | 784 | 875 | 798 | 781 | 838 | 773 |
| Norway | 393 | 454 | 379 | 421 | 491 | 501 |
| Sweden | 464 | 487 | 406 | 462 | 539 | 526 |
| United Kingdom | 2827 | 2670 | 2193 | 2267 | 2432 | 2441 |

ANNEX 2 - NOMINAL GDP 2007-2012 (BILLIONS OF \$US)³ 8.

ANNEX 3 – REGIONAL GDP 9.

Gross domestic product (GDP) per inhabitant, in purchasing power standard (PPS), by NUTS 2 regions, 2010 $(^{\rm t})$

(% of the EU-27 average, EU-27 = 100)



³ International Monetary Fund, April 2013



10. Annex 4 – REGIONAL DISPARITIES IN GDP

11. ANNEX 5 - REGIONAL SPECIALISATION



(*) Sectors classified according to NACE Rev. 1.1; Bulgaria, Slovenia and Sweden, 2007.



12. ANNEX 6 - EU MEMBER STATE AND NORWAY INNOVATION PERFORMANCE⁴

Non-EU countries include Switzerland (CH), Iceland (IS), Norway (NO), RS (Serbia), MK (Former Yugoslav Republic of Macedonia) and Turkey (TR).

⁴ Note: Average performance is measured using a composite indicator building on data for 24 indicators going from a lowest possible performance of 0 to a maximum possible performance of 1. Average performance reflects performance in 2011/2012 due to a lag in data availability

| Belgium | Denmark | Germany | Netherlands Norway ⁵ | | Sweden | United Kingdom |
|--|------------------------------------|-----------------------------|--|---|--|--|
| | | | | | | |
| Food, agriculture and fisheries | Biotechnology | New production technologies | Food, agriculture and fisheries | Energy | Environment | Automobiles |
| Information and Communication technologies | Health | Materials | Energy | Environment | Energy | Biotechnology |
| Nanosciences and nanotechnologie s | Food, agriculture and fisheries | Automobiles | Information and Communication technologies | Food, Agriculture and Fisheries | Health | Energy |
| Materials | Energy | Energy | Nanotechnology | Other transport technologies ⁶ | Information and Communication technologies | Environment |
| Biotechnology | Environment | Environment | Security | | Nanoscience and nanotechnologie s | Information and Communication technologies |
| Environment | Construction | Health | Health | | Security | Nanoscience and |

13. ANNEX 7 - NATIONAL POSITIONS OF STRENGTH - INNOVATION UNION SCOREBOARD

⁵ Figures for Norway only cover scientific publications. Figures for other countries also consider numbers of patents

⁶ Railway vehicles (including hover trains) and associated equipment; aircraft and associated equipment; spacecraft (including satellites) and spacecraft launch vehicles; parts thereof; ships, boats (including hovercraft) and floating structures (SITC Rev. 4)

| technologies | | | nanotechnologie |
|--------------|--|--|-----------------|
| | | | S |
| | | | |

14. ANNEX 8 - GHG REDUCTION TARGETS BY SECTOR⁷

| GHG reductions compared to 1990 | 2005 | 2030 | 2050 | | |
|--|------|--------------|------|----|---|
| Total | -7% | -40% to -44% | -79% | to | - |
| | | | 82% | | |
| Sectors | | | | | |
| Power (CO2) | -7% | -54% to -68% | -93% | to | - |
| | | | 99% | | |
| Industry (CO2) | -20% | -34% to -40% | -83% | to | - |
| | | | 87% | | |
| Transport (incl. CO2 aviation, excl. maritime) | +30% | +20% to -9% | -54% | to | - |
| | | | 67% | | |
| Residential and services (CO2) | -12% | -37% to -53% | -88% | to | - |
| | | | 91% | | |
| Agriculture (non-CO2) | -20% | -36% to -37% | -42% | to | - |
| | | | 49% | | |
| Other non-CO2 emissions | -30% | -72% to -73% | -70% | to | - |
| | | | 78% | | |

15. ANNEX 9 – ACCESSIBILITY OF THE NORTH SEA REGION (EUROPEAN ENVIRONMENT AGENCY)⁸



⁷ ibid

⁸ http://www.eea.europa.eu/data-and-maps/figures/accessibility-in-the-eu27-and

| 16. | ANNEX 10 – NSR | PERFORMANCE | ON EU 2020 TARGETS |
|-----|----------------|-------------|--------------------|
|-----|----------------|-------------|--------------------|

| Target | NSR performance |
|--|---|
| | |
| 75% of the population aged 20-64 should be employed | The region performs well though obviously this performance in under threat. Of the NUTS 2 regions in the programme area, only one had an employment rate of 65%-70% in 2010. A number of regions fell in the 70-75% band. The majority, however, had employment rates over 75%. ⁹ |
| 3% of the EU's GDP should be invested in R&D | The programme average is 2% ¹⁰ though with considerable disparities between countries and regions. |
| The 20/20/20 climate/energy targets should be met (with a 30% emissions reduction if conditions are right) | The targets for emissions and renewable energy generation should be met on a programme area basis but with enormous national variations. Quite weak performance by some countries is compensated for by over-performance in others. Most regions are behind on the energy efficiency target and it is unlikely to be met. ¹¹ |
| The share of early school leavers should be under 10% and at least 40% of the younger generation should have a tertiary degree | Different targets are set for each country for school leavers and most countries are quite close to their target though no target has been provided for the United Kingdom or Norway. For tertiary education, Belgium and particularly Germany are trailing on their targets but other countries have rates well over target values. ¹² |
| 20 million less people should be at risk of poverty | Latest figures are from 2011 and show that despite the economic crisis, poverty risk levels in North Sea countries have risen only slightly and have in several cases actually fallen slightly against 2005 figures. ¹³ |

17. ANNEX 11 - NATIONAL R&D INVESTMENT LEVELS 2011

| BE | DE | DK | NL | NO | SE | UK |
|-------|-------|-------|------|------|-------|-------|
| | | | | | | |
| 2.04% | 2.84% | 3.09% | 2.5% | 1.7% | 3.37% | 1.77% |

 ⁹ See EUROSTAT for the latest lists of regional figures: <u>http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Unemployment_statistics_at_regional_level</u>
 ¹⁰ EUROSTAT figures for 2011 – See Annex 11

¹¹ EUROSTAT figures for 2010/2011 - See Annex 12

 ¹² EUROSTAT figures for 2012 – See Annex 13
 ¹³ EUROSTAT figures for 2011 – See Annex 14

18. ANNEX 12 – 20/20/20 PERFORMANCE

Firstly, in terms of overall greenhouse gas emissions, the picture is generally positive provided that planned efforts are in fact put into place in the years up to 2020 (in that existing initiatives will generally be insufficient to meet targets). Belgium still needs to identify further measures as planned actions will still not be sufficient to reach the national target.

| Country | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------------|------|------|------|------|------|------|------|------|------|------|
| Belgium | 102 | 101 | 102 | 103 | 100 | 97 | 93 | 95 | 87 | 92 |
| Denmark | 102 | 101 | 108 | 99 | 93 | 104 | 98 | 93 | 88 | 89 |
| Germany | 85 | 83 | 83 | 82 | 80 | 80 | 78 | 78 | 73 | 75 |
| Netherlands | 101 | 101 | 102 | 102 | 100 | 98 | 97 | 96 | 94 | 99 |
| Norway | 110 | 107 | 109 | 110 | 108 | 108 | 111 | 108 | 103 | 108 |
| Sweden | 96 | 97 | 97 | 96 | 93 | 92 | 90 | 87 | 82 | 91 |
| United | 88 | 86 | 86 | 86 | 86 | 85 | 84 | 82 | 75 | 77 |
| Kingdom | | | | | | | | | | |

Total Greenhouse Gas Emissions (in CO2 equivalent) indexed to 1990¹⁴

The picture for renewable energy generation is much more varied. Sweden has already more or less its 2020 target while the Netherlands and United Kingdom are struggling and failed to achieve interim targets.

| Country | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|------------|-------|------|------|-------|------|-------|-------|-------|------|------|
| Belgium | 1.27 | 1.31 | 1.6 | 2.26 | 3.08 | 3.65 | 4.62 | 6.08 | 6.79 | 9.04 |
| Denmark | 18.39 | 21.6 | 25.5 | 26.27 | 23.9 | 27.04 | 26.7 | 27.49 | 33.1 | 38.8 |
| | | 1 | | | 7 | | | | 1 | 1 |
| Germany | 7.45 | 7.7 | 9.22 | 10.0 | 11.3 | 14.11 | 14.63 | 16.2 | 16.9 | 20.3 |
| - | | | | | 7 | | | | | 5 |
| Netherland | 3.54 | 3.48 | 4.47 | 6.28 | 6.71 | 6.18 | 7.72 | 9.15 | 9.26 | 10.0 |
| S | | | | | | | | | | 9 |
| Norway | 107.1 | 92.0 | 89.6 | 108.3 | 98.3 | 106.1 | 109.4 | 103.0 | 89.9 | 97.9 |
| - | 9 | 8 | 1 | 8 | 3 | 2 | 2 | 1 | 6 | 2 |
| Sweden | 46.78 | 39.6 | 45.5 | 53.78 | 47.5 | 51.54 | 54.98 | 56.44 | 54.4 | 58.7 |
| | | 1 | 6 | | 5 | | | | 8 | 2 |
| United | 2.81 | 2.65 | 3.52 | 4.16 | 4.47 | 4.88 | 5.4 | 6.63 | 6.71 | 9.2 |

Electricity generated from renewable sources (% of gross electricity consumption)¹⁵

¹⁴ <u>http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tsdcc100</u>. The table shows trends in total man-made emissions of the "Kyoto basket" of greenhouse gases. It presents annual total emissions in relation to the "Kyoto base year". In general the base year is 1990 for the non-fluorinated gases and 1995 for the fluorinated gases. The "Kyoto basket" includes carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), and the so-called F-gases (hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride (SF6)). The indicator does not include emissions and removals related to land use, land-use change and forestry (LULUCF); nor does it include emissions from international aviation and international maritime transport.

¹⁵ <u>http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tsdcc330</u>. This table shows the ratio between the electricity produced from renewable energy sources and the gross national electricity consumption for a given calendar year. It measures the contribution of electricity produced from renewable energy sources to the national electricity consumption. Electricity produced from renewable energy sources comprises the electricity generation from hydro plants (excluding pumping), wind, solar, geothermal and electricity from biomass/wastes. Gross national electricity consumption comprises the total gross national electricity generation from all fuels (including autoproduction), plus electricity imports, minus exports.

| Kingdom | | | | | | |
|---------|---------|--|--|--|--|--|
| | Kingdom | | | | | |

Energy efficiency is the weak performer of the three targets with planned actions only expected to yield 56.22% of the 20% reduction needed by 2020. Nevertheless, North Sea countries are taking a lead on many of the actions needed to improve performance; DK, DE, NL and UK have introduced or are in the process of introducing new energy efficiency standards for new buildings; Belgium has introduced measures for promoting energy efficiency in the public sector; Sweden and Denmark are planning new measures to improve energy efficiency in public transport.¹⁶

Primary energy consumption indexed to 2005¹⁷

| Country | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 |
|-------------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|
| Belgium | 100.9 | 96.8 | 103 | 101.4 | 100 | 99.6 | 96.8 | 100 | 98.8 | 104.8 |
| Denmark | 103.1 | 101.1 | 105.6 | 102.4 | 100 | 107 | 104.5 | 97.9 | 99.9 | 97.8 |
| Germany | 102.6 | 100.1 | 100.9 | 101.3 | 100 | 101 | 98.2 | 99.6 | 95 | 97.4 |
| Netherlands | 98.2 | 98.6 | 100.1 | 101.8 | 100 | 98.8 | 99.5 | 100.4 | 96.3 | 102.8 |
| Norway | 99.6 | 91.9 | 99.6 | 98 | 100 | 101.5 | 102.5 | 111.3 | 106.6 | 126.6 |
| Sweden | 98 | 99.3 | 98.3 | 102.3 | 100 | 97.2 | 96.7 | 96.4 | 89.1 | 99.8 |
| United | 100.1 | 97.3 | 98.8 | 99.2 | 100 | 98.8 | 95.9 | 94.8 | 90 | 92.1 |
| Kingdom | | | | | | | | | | |

19. ANNEX 13 - EARLY LEAVERS FROM EDUCATION AND TRAINING (% OF POPULATION AGED 18-24)

| | 2012 | National target |
|----------------|-------|-----------------|
| Belgium | 12% | 9.5% |
| Denmark | 9.1% | 9.9% |
| Germany | 10.5% | 9.9% |
| Netherlands | 8.8% | 7.9% |
| Norway | 14.8% | No target |
| Sweden | 7.5% | 9.9% |
| United Kingdom | 13.5% | No target |

Tertiary educational attainment (% of population aged 30-34)

| | 2012 | National target |
|-------------|-------|-----------------|
| Belgium | 43.9% | 47% |
| Denmark | 43% | 40% |
| Germany | 31.9% | 42% |
| Netherlands | 42.3% | 40% |
| Norway | 47.6% | No target |
| Sweden | 47.9% | 40% |

¹⁶ Commission services working paper on Europe 2020 targets: climate change and energy

¹⁷ <u>http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tsdcc120</u>. By "Primary Energy Consumption" is meant the Gross Inland Consumption excluding all non-energy use of energy carriers (e.g. natural gas used not for combustion but for producing chemicals). This quantity is relevant for measuring the true energy consumption and for comparing it to the Europe 2020 targets. Better figures are required as of April 2013 but had not been published at the time of writing.

| United Kingdom | 47.1% | No target |
|----------------|-------|-----------|

20. ANNEX 14 - PEOPLE AT RISK OF POVERTY OR SOCIAL EXCLUSION (1000 PERSONS)

| | 2005 | 2011 |
|----------------|-------|-------|
| Belgium | 2338 | 2271 |
| Denmark | 921 | 1039 |
| Germany | 15022 | 16074 |
| Netherlands | 2705 | 2598 |
| Norway | 746 | 709 |
| Sweden | 1325 | 1538 |
| United Kingdom | 14530 | 14044 |

21. ANNEX 15 - MAIN CHALLENGES IN NATIONAL POSITION PAPERS

| Country | Main challenges |
|---------|--|
| | |
| BE | (i) Long-term loss of competitiveness due to cost developments, low productivity growth and knowledge intensity |
| | (ii) Low employment levels and disparities in educational attainment and social inclusion |
| | (iii) Lack of progress toward reduction targets for Greenhouse Gas (GHG) from non-Emissions Trading System sources |
| DE | (i) Regional competitiveness and demographic change |
| | achievement (iii) The transformation of the energy system and the sustainable use |
| | (i) Enhance productivity and competitiveness through innevation and hypiness |
| DK | (i) Enhance productivity and competitiveness through innovation and business |
| | (ii) Enhance labour cupply through inclusion, skills adaption and education |
| | |
| | (iii) Enhance mitigation of and adaptation to climate change |
| NI | (ii) Insufficient R&L intensity and untake by businesses |
| | (i) I Insatisfactory labour market participation for certain groups (women, disabled |
| | neople migrants lone parents long term unemployed and older workers) |
| | (iii) Need for more efficient and sustainable use of resources in particular of |
| | renewables |
| SE | (i) Unemployment rates for young people and vulnerable groups (especially non- |
| | EU citizens and people with migrant backgrounds) remain high |
| | (ii) Falling business investment in R&D |
| | (iii) Inadequate commercialization of innovative output |
| UK | (i) Decreasing labour market opportunities and increasing risk of social exclusion |
| | (ii) Stagnant investment in R&I and low availability of finance to the private sector |
| | (especially SMEs) |
| | (iii) Inefficient use of resources |
| | |

22. ANNEX 16 – ISSUES OF TRANSNATIONAL RELEVANCE LISTED IN NATIONAL POSITION PAPERS

| Country | Recommendations |
|---------|--|
| | |
| BE | Promote business R&I investment, product and service development, technology transfer, social innovation and public services applications, networking, clusters, |
| | open innovation through smart specialisation and remove barriers to labour mobility. Generate sustainable growth and new jobs in maritime sector |
| DE | Given the diversity of German territory and borders, recommendations tend toward administrative measures rather than thematic inputs |
| DK | Thematic focus: Research and innovation, SME competiveness; Energy, environment and climate change; connectivity and accessibility; employment education and training; Maritime development |
| NL | Strategic themes include: research, technological development and innovation, environmental and resource friendly economy, maritime management (flood protection and coastal and marine pollution), labour market integration, cross- border health care provisions. Mobilise co-investments and unleash the smart specialisation potential of cooperative cluster nodes and leverage maritime economic potential |
| SE | Research and innovation, SME competitiveness; Energy, environment and climate change mitigation and adaptation; Connectivity and accessibility; Transnational exchanges in the employment and education and training area; Marine knowledge, maritime spatial planning, integrated coastal zone management, integrated maritime surveillance, protection from major emergencies at sea and on land and sustainable growth and jobs in the maritime economy |
| UK | Fostering innovation, eco-innovation projects, including comprehensive observation of the ocean environment, renewable energy, energy efficiency and environmental protection, and knowledge transfer and sharing of best practice between business, research and education. ETC should mobilise co-investment to realise smart specialisation |

23. ANNEX 17 - EU INDICATORS FOR ASSESSING REGIONAL INNOVATION PERFORMANCE



24. ANNEX 18 – ACTIVITY INDICATORS FOR PROJECTS

| Number of internal project meetings | Internal meeting |
|---|--|
| Number of external meetings (majority of participants are not in project partnership) | External meeting |
| Number of training events | Training event |
| Number of communication initiatives | Communication initiative |
| Number of reports/models | Reports/models |
| Number of policy/strategy/political agreements adopted in partner organisations | Policy/strategy/ political agreement |
| Number of new online services/tools | Online service/tool |
| Number of pilots/demonstrations | Pilot / demonstration |
| Number of tools/networks for continued knowledge exchange after project closure | Tool / network |

25. ANNEX 19 – IDEAS FOR IMPLEMENTATION OF INCREASED MATERIAL RECYCLING

Electronic waste is a good example. Of the electronic waste collected, a small portion is recycled but most products are still not designed for eventual recycling:

- Electronic products are generally designed with a short lifetime and little thought to how materials can be recovered when the product is thrown away
- e-waste creates environmental problems and involves considerable wastage of nonrenewable materials such as rare metals
- Only one third of scrap electronic appliances are collected separately in the EU the rest is collected as part of general waste
- Improvements are needed in collection methods and changing consumer behaviour to increase this percentage including cooperation on practical ways of implementing EU legislation like the Waste Electronic and Electrical Equipment (WEEE) Directive

26. ANNEX 20 – APPROACHES TO GREENING IN MANUFACTURING

Scaling back resource use in production is one end of a spectrum of approaches. Other concepts have already been successfully pioneered by North Sea Region businesses and can be taken further such as:

- Cradle-to-cradle ('products that are either returned to the soil or flow back to industry forever')
- Biomimicry / building with nature (taking nature's best ideas and imitating these designs and processes to solve human problems¹⁸)

¹⁸Janine Benyus, Biomimicry: Innovation Inspired by Nature

• Industrial ecology (creating closed loop processes in which waste is seen as input, thus eliminating the notion of undesirable by-products)¹⁹.

Such methods have been proven to work in a range of cases and projects should show how they can now be extended to other cases and how businesses can be mobilized to invest in such solutions.

27. ANNEX 21 – SMART GRIDS AND BALANCING IN THE NSR

Increased flexibility at the level of local users will provide more opportunities for balancing energy supply by combined management of electricity generation, heating (thermal storage) and transport (battery storage) with non-intermittent power generation such as from gas (preferably biogas) to address short-term energy shortages. When electricity is plentiful and cheap, it can be directed towards storage. During peak periods power to storage devices can be turned off and smart grids should reduce overall consumption so demand for additional generation capacity using balancing fuels (fossil fuels in the short term) can be kept as low as possible. This development is coupled with new net connections between countries²⁰, which should accelerate the process by allowing inter-country balancing and thereby make it easier to integrate more renewable energy in the supply mix.

28. ANNEX 22 – PROVISIONAL EU 2030 TARGETS FOR CARBON EMISSIONS, RENEWABLE ENERGY GENERATION AND ENERGY EFFICIENCY

- Current policy will deliver a 40% reduction in GHG (Greenhouse Gas) emissions by 2050 against 1990 levels. Provisional EU targets require a 40% cut by 2030 and an 80% reduction by 2050²¹
- 27% of energy generation should come from renewable sources by 2030
- Energy consumption should be reduced by 25% by 2030 (non-binding target). It is unlikely that the 20% target for 2020 will be achieved

29. ANNEX 23 – THE TEN-T NETWORK

The re-launched TEN-T policy seeks to improve the environmental performance of the transport sector by directing freight towards a European core network, which should provide excellent sustainable transport options. Most of the European funding available will go towards the core network in an attempt to provide for the first time a coherent network of transcontinental corridors. To implement the core network, nine core network corridors have been designated. Significant funding is available for the core network and in particular the core network corridors through the Connecting Europe Facility and North Sea projects should take account of these on-going infrastructure investments in the region and their potential impact.

 $^{^{19}}$ See for example <u>http://www.symbiosis.dk/en</u> CO₂ emission reduction of 240,000 tons, saved 3 million m³ of water through recycling and reuse, converted 30,000 tons of straw into 5.4 million litres of ethanol, used 150,000 tons of yeast to replace 70% of the soy protein in traditional feed mix for more than 800,000 pigs, and recycled 150,000 tons of gypsum from desulphurization of flue gas (SO₂) as a replacement for importing natural gypsum (CaSO₄)

²⁰ Gesetz zum Ausbau von Energieleitungen – Energieleitungsausbaugesetz – EnLAG

²¹ Communication from the Commission, A Roadmap for moving to a competitive low carbon economy in 2050

A functioning TEN-T network is the key to transforming freight transport in the region. The core network does not however extend into the far north of the programme area and even the more extensive comprehensive network stops short of the remoter parts of the programme area. In the North Sea Region it will also be important to ensure connections between the TEN-T network and Norwegian transport services. Even when connections to the network are nearer at hand (for example in rural areas in the southern part of the programme area), planning will be required to reorient transport services so they feed traffic towards the core and comprehensive networks which should be used for all long distance journeys. The programme will therefore support regions in connecting up to the international networks.

TEN-T terminology

Core network: In order to facilitate the coordinated implementation of the core network nine core network corridors have been set out in the Connecting Europe Facility. Five are at least in part in the North Sea Region (see map below). Key European infrastructure is currently fragmented and large parts have not yet been built. The TEN-T aims to establish a real network, connecting the main transport nodes via the core network. European transport funds will be focused on the core network.

Comprehensive network (also called secondary network): Is the network of feeder routes to allow quick transportation to and from the core network. The aim is that the comprehensive network should be completed by 2050 and that the great majority of European citizens and businesses will be no more than 30 minutes from an access point to the comprehensive network. The comprehensive network should be nationally and/or regionally funded.

Local / regional network (also called tertiary network): The rest of the transport system also needs to be linked up to the network to provide door-to-door services. This is particularly important for rural areas and small towns if they are to avoid marginalization and clearly needs to be based on regional and local expertise and action. TEN-T Core network routes (see DG MOVE for much more extensive comprehensive network maps)



30. ANNEX 24 - ALTERNATIVE FUELS AND USES

Coverage of transport modes and travel range by the main alternative fuels²²

| Fuel | | Mod e | Road | -passen | ger | Road | Road-freight | | Ai r | Ra il | Water | | |
|----------|------|----------|------|---------|-----|------|--------------|-----|---------|----------|-------|-------|--------|
| | | - | | - | | | _ | | - | | | - | |
| | | Rang | Sho | Mediu | Lon | Sho | Mediu | Lon | | | Inlan | Shor | Mariti |
| | | е | rt | m | g | rt | m | g | | | d | t-sea | me |
| LPG | | | | | | | | | | | | | |
| Natur | | | | | | | | | | | | | |
| al | | | | | | | | | | | | | |
| Gas | G | | | | | | | | | | | | |
| | CN | | | | | | | | | | | | |
| | G | | | | | | | | | | | | |
| Electric | city | | | | | | | | | | | | |
| Biofuel | S | | | | | | | | | | | | |
| (liquid) | | | | | | | | | | | | | |
| Hydrog | jen | | | | | | | | | | | | |

²²Taken from Clean Power for Transport: A European alternative fuels strategy

31. ANNEX 25 - COHERENCE AND COORDINATION: STRATEGIC FRAMEWORKS²³



32. ANNEX 26: MAIN GENDER EQUALITY LEGISLATION IN THE NORTH SEA REGION

²³ European Policy Research Centre (EPRC): Ex ante evaluation of the North Sea Region Programme: Coherence and Coordination, October 2013, p. 9.

| The Netherlands | Meerjarenprogramma Emancipatiebeleid |
|-----------------|---|
| United Kingdom | The Equality Act |

33. ANNEX 27 - MAIN ANTI-DISCRIMINATION LEGISLATION IN THE NORTH SEA REGION

| Country | Equal Opportunities and non-discrimination policies |
|-----------------|--|
| Belgium | The Racial Equality Federal Act and the General Anti-discrimination Federal |
| | Act (The Centre for Equal Opportunities and Opposition to Racism) |
| Denmark | Act on the Prohibition of Discrimination in the Labour Market, Act on Ethnic |
| | Equal Treatment and The Institute for Human Rights – The National Human |
| | Rights Institute of Denmark (DIHR) |
| Germany | Labour law, civil law and public law acts (Antidiskriminierungsstelle des |
| | Bundes) |
| Norway | Om lov om arbeidsmiljø, arbeidstid og stillingsvern mv (Arbeidsmiljøloven) |
| | (The Equality Ombud and the Equality Tribunal) |
| Sweden | The new Discrimination Act and the Equality Ombudsman |
| The Netherlands | The Dutch Equal Treatment Laws (NIHR) |
| United Kingdom | The Equality Act and Equality and Human Rights Commission (EHRC) |

34. ANNEX 28 – RELEVANT PARTNERS INVOLVED IN THE PREPARATION OF THE COOPERATION PROGRAMME

| Institution | Country |
|--|---------|
| Agentschap Ondernemen | Belgium |
| City of Bruges | Belgium |
| City of Mechelen | Belgium |
| Flemish Ministry of Mobility and Public Works | Belgium |
| Intercommunale Leiedal | Belgium |
| POM West-Vlaanderen | Belgium |
| Province of East Flanders | Belgium |
| Province of West-Flanders | Belgium |
| Regional Development Agency POM West Flanders | Belgium |
| West Flanders Intermunicipal Association | Belgium |
| Central Denmark Region | Denmark |
| FDT- Association of Danish Transport and Logistics Centres | Denmark |
| North Sea Commission | Denmark |
| Aalborg Municipality North Denmark EU-office | Denmark |
| atene KOM GmbH – Agency for Communication, | |
| Organization and Management | Germany |
| Berends-Consult | Germany |
| City of Bremen | Germany |
| CIVI.CON - Institute for Sustainability Management | Germany |
| Common Wadden Sea Secretariat, CWSS | Germany |
| Free and Hanseatic City of Hamburg, Senate Chancellery | Germany |
| Free Hanseatic City of Bremen, Germany | Germany |
| Hafen Hamburg Marketing e.V. | Germany |
| HafenCity University Hamburg | Germany |
| ICLEI-Local Governments for Sustainability | Germany |
| IZET Innovation Centre | Germany |

| Kreis Nordfriesland | Germany |
|--|-------------|
| Lawaetz Foundation | Germany |
| Lower Saxony State Chancellery | Germany |
| Lübeck University of Applied Sciences | Germany |
| Member of Parliament of Schleswig-Holstein/Germany | Germany |
| Institution | Country |
| Ministry of Justice, Cultural and European Affairs of Land | |
| Schleswig-Holstein | Germany |
| Ostfalia University of Applied Sciences | Germany |
| Port of Hamburg Marketing | Germany |
| Senate Chancellery of the Free and Hanseatic City of Hamburg | Germany |
| State Parliament of Schleswig-Holstein / Germany | Germany |
| UNICONSULT Universal Transport Consulting GmbH | Germany |
| University of Applied Sciences Osnabrück | Germany |
| WFB Bremen Economic Development | Germany |
| WFB Bremen GmbH | Germany |
| Energy Valley | Netherlands |
| FARO Advies | Netherlands |
| Gemeente Emmen | Netherlands |
| Hanze University of Applied Sciences | Netherlands |
| HelderManagement en Advies | Netherlands |
| IDMM SAIL | Netherlands |
| Municipality of Achtkarspelen | Netherlands |
| Municipality of Zaanstad | Netherlands |
| NL Agency | Netherlands |
| Province Drenthe | Netherlands |
| Province of Fryslan | Netherlands |
| Province of Groningen | Netherlands |
| Province of Noord-Holland | Netherlands |

| Provincie Zeeland | Netherlands |
|--|--|
| Rijkswaterstaat | Netherlands |
| Samenwerkingsverband Noord-Nederland (SNN) | Netherlands |
| smartC4RE | Netherlands |
| SNN | Netherlands |
| SYARK | Netherlands |
| University of Groningen | Netherlands |
| Vital Rural Area / Hermanns Consultancy | Netherlands |
| Waterboard Noorderzijlvest | Netherlands |
| Hedmark County Council | Norway |
| Hordaland County Council | Norway |
| Møre og Romsdal County Council | Norway |
| NIBR Norwegian Institute for Urban and Regional Research | Norway |
| Institution | Country |
| Norwegian Institute for Lirban and Regional Research (NIBR) | Norway |
| | |
| Sogn og Fjordane County Municipality | Norway |
| Sogn og Fjordane County Municipality Telemark County Council | Norway |
| Norwegian institute for orban and regional research (NDR) Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council | Norway Norway Norway |
| Norwegian institute for Orban and Regional Research (NDR) Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council Vestfold County Council | Norway Norway Norway Norway |
| Norwegian institute for Orban and Regional Research (NDR) Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council Vestfold County Council Alexandersoninstitutet/EMC | Norway Norway Norway Norway Sweden |
| Norwegian institute for Orban and Regional Research (NDR) Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council Vestfold County Council Alexandersoninstitutet/EMC Göteborgs Stad | Norway Norway Norway Norway Sweden Sweden |
| Norwegian institute for orban and regional research (NDR) Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council Vestfold County Council Alexandersoninstitutet/EMC Göteborgs Stad Hogskolan i Halmstad | Norway Norway Norway Norway Sweden Sweden Sweden |
| Norwegian institute for orban and regional research (NDR) Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council Vestfold County Council Alexandersoninstitutet/EMC Göteborgs Stad Hogskolan i Halmstad ILAB | Norway Norway Norway Norway Sweden Sweden Sweden Sweden |
| Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council Vestfold County Council Alexandersoninstitutet/EMC Göteborgs Stad Hogskolan i Halmstad ILAB Region Halland | Norway Norway Norway Norway Sweden Sweden Sweden Sweden Sweden |
| Norwegian institute for orban and regional research (NER) Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council Vestfold County Council Alexandersoninstitutet/EMC Göteborgs Stad Hogskolan i Halmstad ILAB Region Halland Region Västra Götaland | Norway Norway Norway Norway Sweden Sweden Sweden Sweden Sweden Sweden Sweden |
| Norwegian institute for Orban and Regional Research (RER) Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council Vestfold County Council Alexandersoninstitutet/EMC Göteborgs Stad Hogskolan i Halmstad ILAB Region Halland Region Västra Götaland SIK - The Swedish Institute for Food and Biotechnology | Norway Norway Norway Norway Sweden |
| Norwegian institute for Orban and Regional Research (RER) Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council Vestfold County Council Alexandersoninstitutet/EMC Göteborgs Stad Hogskolan i Halmstad ILAB Region Halland Region Västra Götaland SIK - The Swedish Institute for Food and Biotechnology Stockholm Universitet | Norway Norway Norway Norway Sweden |
| Norwegian institute for Orban and Regional Research (RER) Sogn og Fjordane County Municipality Telemark County Council Vest-Agder county council Vestfold County Council Alexandersoninstitutet/EMC Göteborgs Stad Hogskolan i Halmstad ILAB Region Halland Region Västra Götaland SIK - The Swedish Institute for Food and Biotechnology Stockholm Universitet Värmland County Administrative Board | Norway Norway Norway Norway Sweden |
| Örebro Regional Development Council | Sweden |
|---|----------------|
| AB International Network Ltd. | United Kingdom |
| Aberdeenshire Council | United Kingdom |
| Angus Council | United Kingdom |
| East of Scotland European Consortium | United Kingdom |
| Fife Council | United Kingdom |
| GLAs | United Kingdom |
| Institute for Sustainability | United Kingdom |
| Norfolk County Council | United Kingdom |
| Orkney Islands Council | United Kingdom |
| Shetland Islands Council | United Kingdom |
| South Yorkshire Forest / Sheffield City Council | United Kingdom |
| South Yorkshire Forest Partnership | United Kingdom |
| The Highland Council | United Kingdom |
| University of Liverpool | United Kingdom |

Online Consultation

| Country | Answers |
|----------------|-----------|
| Belgium | 30 people |
| Denmark | 27 people |
| Germany | 88 people |
| Netherlands | 37 people |
| Norway | 19 people |
| Sweden | 19 people |
| United Kingdom | 39 people |

35. ANNEX 29 – NUTS 2 REGIONS IN THE NORTH SEA REGION PROGRAMME

| Country | Region | |
|-------------|------------------|---------------------------------|
| Flanders | BE21 | Prov. Antwerpen |
| | BE23 | Prov. Oost-Vlaanderen |
| | BE25 | Prov. West-Vlaanderen |
| Denmark | DK01 | Hovedstaden |
| | DK02 | Sjælland |
| | DK03 | Syddanmark |
| | DK04 | Midtjylland |
| | DK05 | Nordjylland |
| Germany | DE50 | Bremen |
| | DE60 | Hamburg |
| | DE91 | Braunschweig |
| | DE92 | Hannover |
| | DE93 | Lüneburg |
| | DE94 | Weser-Ems |
| | DEF0 | Schleswig-Holstein |
| Netherlands | NL11 | Groningen |
| | NL12 | Friesland |
| | NL13 | Drenthe |
| | NL21 | Overijssel |
| | NL23 | Flevoland |
| | NL32 | Noord-Holland |
| | NL33 | Zuid-Holland |
| | NL34 | Zeeland |
| Norway | Whole c | ountry |
| Sweden | SE22 | Sydsverige (Skåne län) |
| | SE31 (Värmlai | Norra Mellansverige nds län) |

| | SE21 | Småland med öarna |
|----------------|-----------|-------------------------|
| | (Kronobe | ergs län) |
| | 0=00 | |
| | SE23 | Vastsverige |
| United Kingdom | UKC1 | Tees Valley and Durham |
| | UKC2 | Northumberland and |
| | Tyne and | d Wear |
| | UKE1 | East Yorkshire and |
| | Northern | Lincolnshire |
| | UKE2 | North Yorkshire |
| | UKE3 | South Yorkshire |
| | UKE4 | West Yorkshire |
| | UKF1 | Derbyshire and |
| | Nottingha | amshire |
| | UKF2 | Leicestershire, Rutland |
| | and Nort | hamptonshire |
| | UKF3 | Lincolnshire |
| | UKH1 | East Anglia |
| | UKH3 | Essex |
| | UKJ4 | Kent |
| | UKM5 | North Eastern Scotland |
| | UKM2 | Eastern Scotland |
| | UK M6 | Highlands and Islands |

36. ANNEX 30 – BACKGROUND INFORMATION ON INDICATORS

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| Table 6 - Indicators in practice: Example of indicators for one project | . 57 |

Background

The programme supports joint development of new and improved solutions, which combine knowledge, experience and resources from each of the partner countries. The tangible benefits delivered by each project (for example, a carbon emissions reduction) will be small because the projects are small. The real value of these projects lies instead in validating new approaches and communicating successes to a wider audience so the whole North Sea Region can benefit from the work carried out. In this way, projects can be expected to have a major effect – though the full effect may not be felt for many years. It is this process of experimentation and dissemination which needs to be measured by the output and result indicators.

All of the indicators should help to provide answers to three key questions regardless of theme:

- 1. Have beneficiaries effectively pooled their ideas, experience and resources to arrive at new and better transnational knowledge and proposals on the theme in question?
- 2. Have they validated this new knowledge through piloting and/or consultation with target groups?
- 3. Have the findings been effectively communicated to other members of relevant target groups elsewhere in the programme area?

Project indicators focus on whether the pooled resources of the transnational partnership have resulted in improvements to existing practices in participating organisations / regions. These outputs serve as a proof of concept, which validates the project's approach and therefore justifies other organisations in duplicating it. Project indicators should also measure the success of actions to communicate these results.

Programme indicators focus mainly on the third element: If the improvement delivered by the project is limited to project organisations, the benefit for the North Sea Region as a whole will be small. Projects therefore need to make results available in a way that effectively targets other organisations and enterprises which could implement the same improvements, and actively encourage them to take up project results. If an improvement is eventually implemented across the programme area, the cumulative effect will be significant.

The indicators cannot capture all aspects of all projects. They aim instead to provide some core facts and figures that can be collected and compared across a range of projects. In addition, results are generally transferred partially and stakeholders will rarely be able to pinpoint the precise source of all different inputs or to identify one point in time when a change has been clearly adopted. The programme understands and accepts these limitations. Projects are asked to report according to the best data available to them and to be ready to justify the figures reported.

The pictogram on the first page will guide you through the process while the following tables contain all of the information and definitions you need. The Online Monitoring System will also direct you towards the appropriate indicators for different parts of the application. At the end of the Fact Sheet there is one example of a complete set of project indicators.

TABLE 1: LIST OF DELIVERABLE INDICATORS AND DEFINITIONS

These indicators are used in the work packages to measure the activities that project staff deliver. Indicators are selected from a drop-down list. Note that selection of some indicators will automatically lead to selection of an additional indicator.

| Name of deliverable | Description |
|--|---|
| | |
| Exchange of information event (internal) | Includes all events for exchange on the content (rather than the management) of the project. The events counted should be those used to develop a common understanding of the exact challenges to be tackled, the current situation in each partner organisation, and the solutions that should be attempted to improve the situation. 'Internal' means that the majority of participants are from partner organisations. |
| <i>Must also use:</i> Number of participants | Number of participants per event. The same people attending multiple events can be counted twice. |
| Exchange of information event (external) | As above but with external participants. 'External' means that the majority of participants are from outside the partner organisations and are instead representatives of the target group(s). |
| <i>Must also use:</i> Number of participants | As above |
| Report/strategy | Includes all written conclusions/partial conclusions published on the project content. Includes digital publication. Does not include reporting to the programme. |
| <i>Must also use:</i> Number of readers | Either through physical copies distributed (not number printed) or number of hits on digital versions |
| Policy change | Includes not just political agreements but all changes to the general operating principles of organisations inside and outside the project partnership. Projects should be able to describe the before/after situation and link this directly to the project. |
| Working practice change | Includes all changes to standard working practices related to the project content. For example, adoption of new processes, new standards, new tools etc. |
| Pilots/demonstrations | Number of solutions tested – either through physical testing or piloting of new approaches with target groups. This includes testing of new training offers related to other project activities. Projects will be expected to provide details. |
| New services | Launch of new services that will continue after the close of the project and are open to the 'public' (i.e. members of the target groups outside the project partnership). |
| <i>Must also use:</i> Number of users | At the time of reporting. It is important that these services continue after project closure. One-off services like an advisory workshop should be reported under 'Events' |
| Communication initiative | Brochures, leaflets, web content, social media contributions and other communication initiatives. Project activity plans should provide details. |

| Must also use: Number of users | Measurement depends on the media being used. | | | |
|--|---|--|--|--|
| Dissemination event | Events run purely as dissemination activities (such as many final conferences) and attendance at external events to publicise the project. | | | |
| <i>Must also use:</i> Number of participants | | | | |
| Other (Define) | Wherever possible, projects should use the standard list. Where an important activity cannot be included using the standard list, projects should define their own deliverable. This should be done in consultation with the Joint Secretariat. | | | |

TABLE 2 – OUTPUT INDICATORS FOR THE SPECIFIC OBJECTIVES

There is one output indicator for each specific objective and this will be automatically selected for you. Read the definition of the relevant indicator for a full picture of what is (and is not) covered.

| ID | Indicator (name of indicator) | Measurement | Target | Source of | Frequency of | Definitions / Comments |
|-----|--|-------------|--------|----------------------|--------------|---|
| | | unit | value | data | reporting | |
| | | | (2023) | | | |
| 1.1 | Number of enterprises cooperating with new / improved knowledge | Enterprises | 500 | Project reporting | Annual | A cooperating enterprise should be engaged in regular two-way contact with the knowledge partnership regarding |
| | partnersnips | | | | | product / process / service innovation. It is not enough to |
| | | | | | | be e.g. a recipient of a newsletter. Only enterprises starting |
| | | | | | | counted. |
| | | | | | | A knowledge partnership is a formal cooperation of enterprises, researchers, the public sector, NGOs and/or end users. It should provide the knowledge needed to create new products and services and accompany development to the point when these products can be introduced to the market. Partnerships also promote improvements to existing processes and the adoption of new technologies. |
| | | | | | | New / improved means that the knowledge partnership has been established as a result of the project or that it has significantly changed the way it operates as a result of the project. |
| 1.2 | Number of improved or new | Innovation | 21 | Project | Annual | Innovation support measures are initiatives or schemes |
| | innovation support measures launched | support | | | | (other than a knowledge partnership) which aim to |

| | for enterprises | measures | | reporting | | encourage more enterprises to innovate or to increase the amount of innovation in already innovating enterprises. Projects should report the number of measures for this indicator rather than the number of participating enterprises. In this context a measure is a clearly defined set of actions in support of innovation. For example, one measure could be an innovation audit. Another could be a |
|-----------------|--|--|----|----------------------|--------|---|
| | | | | | | graduate recruitment scheme for SMEs. Projects should provide a breakdown of these measures when reporting on this indicator. |
| | | | | | | New / improved means that the measures has been implemented as a result of the project or that it has been significantly changed as a result of the project. |
| 1.3 | Number of improved or new innovation support measures launched for public service delivery | Innovation support measures | 21 | Project reporting | Annual | As above but targeted at for public sector organisations. Includes measures which aim to encourage more public administrations to innovate or to increase the amount of innovation in already innovating authorities. Projects should report the number of measures for this indicator rather than the number of participating authorities. Projects should provide a breakdown of these initiatives when reporting on this indicator. |
| 2.1 & 2.2 | Number of green products, services and processes piloted and/or adopted by the project | Green solutions piloted / demonstrated | 54 | Project reporting | Annual | A 'green' product, service or process is one that offers improved environmental performance in terms of preserving natural capital, using better production methods, and / or changing consumption patterns. Green solutions should provide a demonstrable reduction in carbon and other emissions and/or resource use. |

| | | | | | | Piloted or adopted means that projects can report completely new solutions developed and tested by the project, or solutions developed outside the project but more widely adopted as a result of the project. Projects should provide a breakdown of these solutions when reporting on this indicator. |
|-----|---|---|----|----------------------|--------|--|
| 3.1 | Number of new and/or improved climate change adaptation solutions demonstrated | Climate change adaptation solutions | 21 | Project reporting | Annual | A climate change adaptation solution is a method that prevents climate change damage to a target site or reduces the negative impact of such damage. New / improved means that the solution has been developed as a result of the project or that it has been significantly changed as a result of the project. Demonstrated means that the solution has been tested in the field and a professional analysis carried out of its costs, advantages, disadvantages and potential improvements. Projects should provide a breakdown of these solutions when reporting on this indicator. |
| 3.2 | Number of sites managed using new solutions supporting long-term sustainability | Sites | 35 | Project reporting | Annual | This output aims to capture the take-up of new environmental management solutions across the North Sea Region. A 'site' means a geographically separate area managed in line with the new solution (e.g. a river, a national park, a harbour). Projects should be able to provide lists of sites if required and the size of these sites. A new solution means that the solution has been |

| | | | | | | developed as a result of the project. |
|-----------------|---|------------------------------|----|----------------------|--------|--|
| 4.1 & 4.2 | Number of new and/or improved green transport solutions adopted | Green transport solutions | 54 | Project reporting | Annual | Green transport solutions mean environmentally friendly and low carbon transport solutions. New / improved means that the solution has been developed as a result of the project or that it has been significantly changed as a result of the project. Adopting solutions means changing existing practices / procedures or equipment as a result of the project either by modifying existing practices or introducing completely new practices. |
| | | | | | | Each improved green transport mode/method on a route is reported as one solution. For example, 3 reduced emission ships on one shipping route count as one solution. Introducing improved load management on the same route counts as an additional solution etc. Projects should provide a breakdown of these solutions when reporting on this indicator. |

TABLE 3 – COMPULSORY OUTPUT INDICATORS

All projects will have to complete the compulsory indicators as most of these data are aggregated by the European Commission to provide information on the performance of programmes throughout the European Union. Projects report on all 5 indicators – even if the target is zero.

| ID | Indicator (name of indicator) | Measurement unit | Target value (2023) ²⁴ | Source of data | Frequency of reporting | Definitions / Comments |
|----------------------------|---|---------------------|---|----------------------|------------------------|--|
| Used by all projects | Number of enterprises participating in cross- border, transnational or interregional research projects | Enterprises | 80 | Project reporting | Annual | Commission definition: Number of enterprises that cooperate with research institutions in transnational R&D projects. At least one enterprise and one research institution participates in the project. One or more of the cooperating parties (research institution or enterprise) may receive the support but it must be conditional to the cooperation. The cooperation may be new or existing. The cooperation should last at least for the duration of the project. Enterprise: Organisation producing products or services to satisfy market needs in order to achieve profit. The origin of the enterprise (inside or outside of the EU) does not matter. In case one enterprise takes the formal lead and others are subcontractors but still interacting with the research institution, all enterprises should be counted. Enterprises cooperating in different projects should be added up (provided that all projects receive support); this is not regarded as multiple counting. Research institution: An organisation for which R&D is a primary activity. |

²⁴ The method for setting the output targets is based on the figures for the budget allocation per priority. This was used to estimate the number of projects expected per priority based on typical project sizes in the 2007-2013 period. Number of partner organizations has also been calculated based on typical project sizes for the 2007-2013 period. This has been done on priority level and the figures then split evenly across specific objectives.

| Used by all projects | Number of research institutions participating in cross- border, transnational or interregional research projects | Organisations | 80 | Project reporting | Annual | Commission definition: Number of research institutions in transnational R&D projects. The cooperation may be new or existing. The cooperation should last at least for the duration of the project. Research institution: An organisation for which R&D is a primary activity. |
|----------------------------|--|----------------------------------|------|----------------------|--------|--|
| Used by all projects | Number of organisations / enterprises adopting new solutions by project end | Organisations and enterprises | 780 | Project reporting | Annual | Adopting new solutions means changing existing practices / procedures or equipment as a result of the project either by modifying existing practices or introducing completely new practices. New in this context means new to the organistaion / enterprise concerned. All new solutions must introduce new functionality or fundamentally different technologies compared to existing practices. In the case of process innovation, the new process must introduce demonstrable improvements in efficiency and / or effectiveness. If an organisation or enterprise introduces several new solutions, it is still counted as one organisation / enterprise. |
| Used by all | Number of organisations / enterprises informed | Organisations and enterprises | 7800 | Project reporting | Annual | informed about new solutions means obtaining sufficient information to consider a change to existing practices / procedures or equipment as a result of project information activities. Requires |
| projects | about new solutions by project end | | | | | that the enterprise / organisation has actively sought the information by e.g. attending an event, visiting a website, or requesting a publication. |

TABLE 4 - PROGRAMME RESULT INDICATORS

The programme has a result indicator for each specific objective. Projects do not need to report on these but the application and subsequent reports do need to explain how the project should logically contribute to the relevant result.

IMPORTANT NOTE – DEFINITION OF CAPACITY

Capacity: All result indicators target 'capacity development '. This means understanding and acting on the obstacles that inhibit stakeholders in relevant target groups from realizing their goals, while at the same time enhancing the abilities that will allow them to achieve measurable and sustainable results. Obstacles may be organizational, technical/technological, infrastructural, operational, logistical or service-related, financial and economic, or political.

Improved capacity will therefore involve two components. Firstly, it requires that new and/or improved methods, processes, services, products or technologies are made available. Secondly, it requires that potential users are made aware of these new offers in such a way that they can adopt them. Progress on the results therefore includes both improving the potential to act and effectively raising awareness of the new potential.

| ID | Indicator | Measurement | Base- | Base- | Target | Source of | Frequency of | Definition / Comments |
|----|---------------------------|----------------|-------|-------|--------|------------|--------------|---|
| | | unit | line | line | value | data | reporting | |
| | | | value | year | (2023) | | | |
| | 1.1 Capacity of knowledge | Capacity scale | | 2015 | | Expert | 2017. 2019 | A knowledge partnership is a formal cooperation |
| | partnerships in the North | | | | | consultati | and at | of enterprises, researchers, the public sector, |
| | Sea Region to deliver | | | | | on during | programme | NGOs and/or end users. It should provide the |
| | marketable product, | | | | | evaluatio | close | knowledge needed to create new products and |
| | service and process | | | | | n | | services and accompany development to the point |
| | innovations | | | | | | | when these products can be introduced to the |
| | | | | | | | | |

| r | | T T | | | | |
|---|------------------------------|----------------|------|------------|------------|--|
| | | | | | | market. Partnerships also promote improvements |
| | | | | | | to existing processes and the adoption of new |
| | | | | | | technologies. |
| | | | | | | |
| | | | | | | A marketable innovation is a new or improved |
| | | | | | | product or service which can be traded to satisfy |
| | | | | | | market needs in order to achieve profit. |
| | 1.2 Canacity of authorities | Capacity scale | 2015 | Evpert | 2017 2019 | Authorities are public organisations supporting |
| | 1.2 Capacity of authorities | Capacity scale | 2015 | consultati | 2017, 2013 | Automities are public organisations supporting |
| | / practitioners to increase | | | consultati | and at | innovation in enterprises. Practitioners are other |
| | the scope and quality of | | | on during | programme | organisations with this role such as universities, |
| | innovation in enterprises | | | evaluatio | close | incubators, business associations etc. |
| | | | | n | | |
| | | | | | | The scope of innovation regards the amount of |
| | | | | | | innovation being carried out in enterprises. The |
| | | | | | | quality of innovation regards whether this |
| | | | | | | innovation results in marketable products and |
| | | | | | | services. |
| | | | | | | |
| | 1.3 Capacity of authorities | Capacity scale | 2015 | Expert | 2017, 2019 | As above except that the target group is public |
| | / practitioners to increase | | | consultati | and at | authorities and other organisations delivering |
| | the scope and quality of | | | on during | programme | services for the public good. Improved quality |
| | innovation in public service | | | evaluatio | close | means improvements to the efficiency and |
| | delivery | | | n | | effectiveness of public service delivery. |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | 2.1 Capacity of enterprises | Capacity scale | 2015 | Expert | 2017, 2019 | Adopting new or improved solutions means |
| | and organisations to adopt | | | consultati | and at | changing existing practices / procedures or |
| | new or improved green | | | on during | programme | equipment either by modifying existing practices |
| | products, processes and | | | evaluatio | close | or introducing completely new practices. |
| | services | | | n | | |
| | | | | | | A 'green' product, service or process is one that |

| | | | | | | . Manual terror and the terror and the terror of the terror ter |
|-----------------------------|----------------|------|------------|---------|------|---|
| | | | | | | offers improved environmental performance in |
| | | | | | | terms of preserving natural capital, using better |
| | | | | | | production methods, and / or changing |
| | | | | | | consumption patterns. Green solutions should |
| | | | | | | provide a demonstrable reduction in carbon |
| | | | | | | emissions and/or resource use. |
| | | | | | | |
| 2.2 Canacity of authorities | Capacity scale | 2015 | Expert | 2017, | 2019 | Authorities are public organisations. Practitioners |
| / practitioners around the | | | consultati | and | at | are other organisations other than enterprises. |
| North Sea to identify and | | | on during | program | nme | |
| implement new solutions | | | evaluatio | close | | New in this context means new to the organistaion |
| for reducing their | | | n | | | concerned. New solutions must introduce new |
| environmental footprint | | | | | | functionality or fundamentally different |
| | | | | | | technologies compared to existing practices. In the |
| | | | | | | case of process innovation, the new process must |
| | | | | | | introduce demonstrable improvements in |
| | | | | | | efficiency and / or effectiveness. |
| | | | | | | |
| | | | | | | Environmental footprint is the cumulative negative |
| | | | | | | environmental impacts of human activity in the |
| | | | | | | region concerned. |
| | | | | | | |

| | 3.1 Canacity of relevant | Capacity scale | 2015 | Expert | 2017, | 2019 | Authorities are public organisations. Practitioners |
|---|-----------------------------|----------------|------|------------|---------|------|---|
| | authorities / practitioners | | | consultati | and | at | are other organisations. In the context of this |
| | around the North Sea to | | | on during | program | nme | indicator, practitioners may include enterprises |
| | identify and implement | | | evaluatio | close | | seeking to climate-proof their activities. |
| | solutions for improving | | | n | | | |
| | climate change resilience | | | | | | Identifying solutions means finding effective and |
| | | | | | | | realistic methods for addressing the various |
| | | | | | | | effects of climate change. |
| | | | | | | | |
| | | | | | | | Implementing solutions means the ability to put |
| | | | | | | | new solutions in place and manage the associated |
| | | | | | | | costs, disadvantages and potential improvements |
| | | | | | | | needed. |
| | | | | | | | |
| | | | | | | | Improving climate change resilience means |
| | | | | | | | reducing the risk of negative events, reducing the |
| | | | | | | | severity of unavoidable events, and reducing the |
| | | | | | | | damage caused during all events. |
| | | | | | | | |
| Ī | 3.2 Capacity of North Sea | Capacity scale | 2015 | Expert | 2017, | 2019 | This indicator addresses all relevant stakeholders |
| | regions to improve the | | | consultati | and | at | in the North Sea programme area. |
| | quality of the environment | | | on during | program | nme | |
| | | | | evaluatio | close | | Improving the quality of the environment is |
| | | | | n | | | defined as reducing negative impacts, repairing |
| | | | | | | | past damage and/or promoting ecosystem |
| | | | | | | | services and biodiversity. |
| | | | | | | | |
| Ī | 1.1 Canacity of transport | Capacity scale | 2015 | Expert | 2017, | 2019 | Transport and logistics stakeholders are all those |
| | and logistics stakeholders | | | consultati | and | at | concerned with providing transport and logistics |
| | to increase the proportion | | | on during | program | nme | services and infrastructure, those regulating or |
| | of long-distance freight | | | evaluatio | close | | setting policy for such services, and the users of |
| | carried on sustainable | | | | | | |

| modes in the North Sea | | | n | | | these services. |
|-----------------------------|----------------|------|------------|---------|------|--|
| Region | | | | | | |
| | | | | | | Long distance freight in this context means freight |
| | | | | | | travelling more than 150 km. |
| | | | | | | |
| | | | | | | Sustainable modes in this context means transport |
| | | | | | | modes with the best possible Greenhouse Gas and |
| | | | | | | emissions profile. |
| | | | | | | • |
| | | | | | | The proportion of freight means that this result |
| | | | | | | targets an increase in the overall share of goods |
| | | | | | | carried by sustainable modes rather than a simple |
| | | | | | | increase in overall tennage |
| | | | | | | increase in overall tolllage. |
| 4.2 Capacity of authorities | Capacity scale | 2015 | Export | 2017 | 2010 | Green transport services means transport choices |
| 4.2 Capacity of authorities | Capacity scale | 2015 | | 2017, | 2019 | with the best ressible. Creathouse Cos and |
| and enterprises to increase | | | consultati | and | at | with the best possible Greenhouse Gas and |
| the use of green transport | | | on during | program | me | emissions profile. |
| services | | | evaluatio | close | | |
| | | | n | | | This result targets an increase in the overall share |
| | | | | | | of people and goods carried by sustainable modes. |
| | | | | | | |

38. TABLE 5 – OVERVIEW OF SPECIFIC OBJECTIVES AND PROGRAMME RESULT INDICATORS

This table maps the programme intervention logic and shows how the general objectives in the regulations have been translated into specific targets for results. It is provided primarily for background information.

| Priority axis | Thematic objective ²⁵ | Investment priorities ²⁶ | Specific objectives corresponding to the investment priority | Result indicators corresponding to the specific objective |
|---|--|--|---|--|
| Priority 1: Thinking Growth: Supporting growth in North Sea Region economies | 1) Strengthening research, technological development and innovation | b) Promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialization, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies | 1.1 Develop new or improved knowledge partnerships between businesses, knowledge institutions, public administrations and end users with a view to long-term cooperation (post project) on developing products and services 1.2 Enhance regional innovation support capacity to increase long-term innovation levels and support smart specialization strategies 1.3 Stimulate the public sector to generate innovation demand and innovative solutions for improving public service delivery | 1.1 Capacity of knowledge partnerships in the North Sea Region to deliver marketable product, service and process innovations 1.2 Capacity of authorities / |
| | | | | practitioners to increase the scope and quality of innovation in |

²⁵ Title of thematic objective (not applicable to technical assistance).

²⁶ Title of investment priority (not applicable to technical assistance).

| | | | - | |
|---|--|---|---|---|
| | | | | enterprises 1.3 Capacity of authorities / practitioners to increase the scope and quality of innovation in public service delivery |
| Priority 2: Eco- innovation: Stimulating the green economy | 6) Preserving and protecting the environment and promoting resource efficiency | g) Supporting industrial transition towards a resource efficient economy, promoting green growth, eco-innovation and environmental performance management in the public and private sectors | 2.1 Promote the development and adoption of products, services and processes to accelerate greening of the North Sea Region economy 2.2 Stimulate the adoption of new products, services and processes to reduce the environmental footprint of regions around the North Sea | 2.1 Capacity of enterprises and organisations to adopt new or improved green products, processes and services |
| | | | | 2.2 Capacity of authorities / practitioners around the North Sea to identify and implement new ways of reducing their environmental footprint |

| Priority 3: Sustainable North Sea Region: Protectina | 5) Promoting climate change adaptation, risk prevention and management | a) Supporting investment for adaptation to climate change, including ecosystem-based approaches & | 3.1 Demonstrate new and/or improved methods for improving the climate resilience of target sites | 3.1 Capacity of relevant authorities / practitioners around the North Sea to identify and implement solutions for improving climate change resilience |
|--|--|---|--|---|
| against climate change and preserving the environment | & 6) Preserving and protecting the environment and promoting resource efficiency | d) Protecting and restoring biodiversity and soil and promoting ecosystem services, including through NATURA 2000, and green infrastructure | 3.2 Develop new methods for the long- term sustainable management of North Sea ecosystems | 3.2 Capacity of North Sea regions to improve the quality of the environment |
| Priority 4: Promoting green transport and mobility | 7) Promoting sustainable transport and removing bottlenecks in key network infrastructures | c) Developing and improving environmentally-friendly (including low-noise) and low-carbon transport systems, including inland waterways and maritime transport, ports, multimodal links and airport infrastructure, in order to promote sustainable regional and local mobility | 4.1 Develop demonstrations of innovative and/or improved transport and logistics solutions with potential to move large volumes of freight away from long-distance road transportation | 4.1 Capacity of transport and logistics stakeholders to increase the proportion of long-distance freight carried on sustainable modes in the North Sea Region |
| | | | 4.2 Stimulate the take-up and application of green transport solutions for regional freight and personal transport | 4.2 Capacity of authorities and enterprises to increase the use of green transport services |

39. TABLE 6 - INDICATORS IN PRACTICE: EXAMPLE OF INDICATORS FOR ONE PROJECT

The example below shows how the system works in practice for a project. As can be seen, there are relatively few indicators and almost all are selected from drop down menus as part of the application writing process.

| Туре | Indicator | Target |
|-------------|---|--------|
| Deliverable | Exchange of information event (internal) | 6 |
| Deliverable | Number of participants | 120 |
| Deliverable | Exchange of information event (external) | 2 |
| Deliverable | Number of participants | 200 |
| Deliverable | Report/strategy | 4 |
| Deliverable | Numbers of readers | 2000 |
| Deliverable | Pilots/demonstrations | 10 |
| Deliverable | Working practice change | 30 |
| Deliverable | Communication initiative | 4 |
| Deliverable | Number of users | 4000 |
| Deliverable | Dissemination event | 1 |
| Deliverable | Number of participants | 120 |
| Output | Number of sites managed using | 20 |
| Ουιραι | new solutions supporting long- term sustainability | 20 |
| Output | Number of enterprises | 0 |
| | receiving support | |

| Com | ments |
|---------------|---|
| Proje wher | ect selects from drop down ment n completing application |
| Auto selec | selected because events has been ted |
| Auto selec | selected because events has been ted |
| Num | ber of separate published documents |
| Auto selec | selected because events has beer ted |
| | |
| | |
| Auto been | selected because communication has selected |
| Auto selec | selected because events has beer ted |
| Norn | nally mandatory though there is very |
| limite | ed choice for the transport priority |
| | |

| Output | Number of enterprises participating in cross-border, transnational or interregional research projects | 0 | Mandatory indicator |
|--------|--|-----|---|
| Output | Number of research institutions participating in cross-border, transnational or interregional research projects | 7 | Mandatory indicator |
| Output | Number of organisations / enterprises adopting new solutions by project end | 100 | Auto selected for all output indicators |
| Output | Number of organisations / enterprises informed about new solutions by project end | 250 | Auto selected for all output indicators |
| Result | Reduction in heavy metals in harbour sediments (copper, mercury and lead) | 50% | Project selected but essential for programme reporting as it validates the project pilots |

The Performance Framework

A Performance Framework has to be established for each priority. The targets used in the performance framework are largely dictated by European Commission requirements: There are mandatory financial indicators and it is a requirement that the final output targets should draw from a selection of the programme outputs and cover the majority of funded actions. The formal requirements are:

- Key implementation steps: Should be used where no outputs would be achieved by the milestone stage (i.e. end of 2018). Cannot be used as end of programme targets (by which point all outputs should have been delivered)
- Financial indicator: One per priority relating to the total amount of eligible expenditure entered in the accounting system of the Certifying Authority by the milestone stage (ERDF + co-financing excluding Norway)
- Output indicators: Must be selected from amongst the output indicators already chosen for the programme and representing the majority of resources allocated to the priority

| Priority | Indicator type | ID | Indicator or key | Measurement | Milestone to | Final target | Source of data | Explanation of relevance of indicator, |
|----------|----------------------|----|-------------------------------|--------------|--------------------------|------------------|---------------------|--|
| axis | | | implementation step | unit, where | achieve by | (2023) | | where appropriate |
| | | | | appropriate | 31.12.18 | | | |
| | | | | | | | | |
| 1 | | | Total eligible expenditure | | | | | |
| | | | incurred by beneficiaries and | | | | | |
| | | | entered in the accounting | | | | | |
| | Financial | | system of the Certifying | | | | Certifying | Compulsory financial indicator for all |
| | indicator | | Authority ²⁷ | EUR million | €2,250,000 ²⁸ | €93,662,224 | Authority | priorities |
| 1 | Kov | | | | | | | |
| T | implomentation | | Number of applications | Nr of | | | Monitoring | Poflacts programma ability to attract |
| | stop | | received and accessed | applications | 27 | Γ4 ²⁹ | wontoning | committed bonoficiaries |
| | step | | Teceiveu anu assesseu | applications | 27 | 54 | system | committed beneficiaries |
| 1 | | | Number of enterprises | Enterprises | NA | | Monitoring | |
| | | | cooperating with assisted | | | | system / | |
| | | | research institutions | | | | project | |
| | Output ³⁰ | | | | | 500 | reporting | |
| 1 | | | | | | | N A - usit - uius - | |
| 1 | | | Number of Improved or new | weasures | NA | | Monitoring | |
| | | | Innovation support measures | | | | system / | |
| | Output | | launched for businesses | | | 24 | project | |
| | Output | | | | | 21 | reporting | |
| 1 | | | Number of improved or new | Measures | NA | | Monitoring | |
| | | | innovation support measures | | | | system / | |
| | | | launched for public service | | | | project | |
| | Output | | delivery | | | 21 | reporting | |
| | | | | | | | | |

²⁸ Fiche p.8

²⁹ All targets for number of applications are based on (i) Estimated number of projects based on future budget and average budget/project in the 2007-2013 period and (ii) an approx. 50% approval rate as in the 2007-2013 period

³⁰ All outputs are selected from the priority output indicators. The selected outputs must cover the majority of spending under the priority

| 2 | Financial indicator | Total eligible expenditure incurred by beneficiaries and entered in the accounting system of the Certifying Authority ³¹ | EUR million | €2,250,000 ³² | €90,317,144 | Certifying Authority | Compulsory financial indicator for all priorities (see Guidance Fiche p.5) |
|---|-------------------------------|---|--|--------------------------|-------------|--|--|
| 2 | Key implementation step | Number of applications received and assessed | Nr. of applications | 15 | 30 | Monitoring system | Reflects programme ability to attract committed beneficiaries |
| 2 | Output | Number of green products, services and processes piloted and/or adopted | Green products, services, processes | NA | 54 | Monitoring system / project reporting | |
| 3 | Financial indicator | Total eligible expenditure incurred by beneficiaries and entered in the accounting system of the Certifying Authority ³³ | EUR million | €2,250,000 ³⁴ | €73,591,748 | Certifying Authority | Compulsory financial indicator for all priorities (see Guidance Fiche p.5) |
| 3 | Key implementation step | Number of applications received and assessed | Nr. of applications | 13 | 26 | Monitoring system | Reflects programme ability to attract committed beneficiaries |
| 3 | Output | Number of new and/or improved climate change adaptation solutions | Climate change adaptation | NA | 21 | Monitoring system / project | |

³² Fiche p.8

³⁴ Fiche p.8

| | | demonstrated | solutions | | | reporting | |
|---|-------------------------------|---|---------------------------------|--------------------------|-------------------|--|--|
| 3 | Output | Number of sites managed using new solutions supporting long- term sustainability | Sites | NA | 35 | Monitoring system / project reporting | |
| 4 | Financial indicator | Total eligible expenditure incurred by beneficiaries and entered in the accounting system of the Certifying Authority ³⁵ | EUR million | €2,250,000 ³⁶ | €56,866,350 | Certifying Authority | Compulsory financial indicator for all priorities (see Guidance Fiche p.5) |
| 4 | Key implementation step | Number of applications received and assessed | Nr. of applications | 20 | 40 | Monitoring system | Reflects programme ability to attract committed beneficiaries |
| 4 | Output | Number of new and/or improved green transport solutions adopted | Green transport solutions | NA | 54 | Monitoring system / project reporting | |
| 5 | Financial indicator | Total eligible expenditure incurred by beneficiaries and entered in the accounting system of the Certifying Authority ³⁷ | EUR million | €1,000,000 ³⁸ | €14,336,054 | Certifying Authority | Compulsory financial indicator for all priorities (see Guidance Fiche p.5) |
| 5 | Key implementation | Number of reports checked and | Number of | 40 | 300 ³⁹ | Monitoring | Monitoring projects and paying out funds is one of the core tasks of the Programme |

³⁶ Fiche p.8

³⁸ Fiche p.8
 ³⁹ Based on 4 reports per approved project

| | step | paid | reports | | | system | bodies during a more advanced stage of |
|---|----------------|----------------------------|---------------|-----|--------------------|------------|--|
| | | | | | | | the Programme life cycle |
| | | | | | | | |
| 5 | Кеу | | | | | | Reflecting the success of efforts to |
| | implementation | Number of beneficiaries in | Number of | | | Monitoring | promote the programme to relevant |
| | step | approved projects | beneficiaries | 450 | 939 ⁴⁰ | system | target groups |
| | | | | | | | |
| 5 | | | | | | | A fast allocation of funds to projects is a |
| | | | Percentage of | | | | precondition to fulfill the programme's |
| | Кеу | | funds | | | | N+3 targets. It is an indicator particularly |
| | implementation | Share of programme funding | allocated to | | | Financial | important at an early stage of the |
| | step | allocated to projects | projects | 60% | 100% ⁴¹ | reports | programme life cycle. |
| | | | | | | | |

 ⁴⁰ Extrapolated from IVB figures
 ⁴¹ At programme peak but fluctuating towards programme close based on returned funds and additional allocations

Annex 1: Main deliverable indicators

| Name of deliverable | Description |
|----------------------------------|--|
| | |
| Exchange of information event | Includes all events for exchange on the content (rather than the |
| (internal) | management) of the project. The events counted should be those |
| | used to develop a common understanding of the exact challenges to |
| | be tackled, the current situation in each partner organization, and |
| | the solutions that should be attempted to improve the situation. |
| | 'Internal' means that the majority of participants are from partner |
| | organisations. |
| <i>Must also use:</i> Number of | Number of participants per event. The same people attending |
| participants | multiple events can be counted twice. |
| Exchange of information event | Includes all events for exchange on the content (rather than the |
| (external) | management) of the project. The events counted should be those |
| | used to develop a common understanding of the exact challenges to |
| | be tackled, the current situation in each partner organization, and |
| | the solutions that should be attempted to improve the situation. |
| | 'External' means that the majority of participants are from outside |
| | the partner organisations and are instead representatives of the |
| | target group(s). |
| Must also use: Number of | - |
| Papart (stratogy | Includes all written conclusions (nartial conclusions nublished on the |
| Report/strategy | nicidues all written conclusions/partial conclusions published on the |
| Must also use Number of readers | Fither through physical copies distributed or number of accesses to |
| Must diso use: Number of readers | digital versions |
| Policy change | Includes not just political agreements but all changes to the general |
| i oney change | operating principles of organisations inside and outside the project |
| | nartnershin. Projects should be able to describe the before/after |
| | situation and link this directly to the project. |
| Working practice change | Includes all changes to standard working practices related to the |
| | project content. For example, adoption of new processes, new |
| | standards, new tools etc. |
| Pilots/demonstrations | Number of solutions tested – either through physical testing or |
| | piloting of new ideas with target groups. This includes testing of new |
| | training offers related to other project activities. Projects will be |
| | expected to provide details |
| New services | Launch of new services that will continue after the close of the |
| | project and are open to the 'public' (i.e. members of the target |
| | groups outside the project partnership). |
| Must also use: Number of users | At the time of reporting. It is important that these services continue |
| | after project closure |
| Communication initiative | Brochures, leaflets, web content, social media contributions and |
| | other communication initiatives. Project activity plans should provide |
| | details. |
| Must also use: Number of users | Measurement depending on the media being used. |
| Dissemination event | Events run purely as dissemination activities (such as many final |
| | conferences) and attendance at external events to publicise the |
| | project. |
| Must also use: Number of | |
| participants | |

40. ANNEX 31 – ACTION PLAN FOR ESTABLISHING BASELINES AND TARGETS FOR QUALITATIVE RESULT TARGETS

INTRODUCTION

This paper follows on from *EPRC Ex Ante Paper on Indicators* (March 2014), it sets out proposals for a methodology for setting and monitoring result baselines.

SETTING RESULT BASELINES, RESULT TARGETS AND MONITORING

The North Sea Region Programme has developed a strong focus on developing capacity and transnational solutions to address key strategic development challenges in Programme area. Given the nature of the Programme's activities and the type of change it seeks to address qualitative analyses have been identified as the only realistic option for capturing and assessing the required programme-level results, see *EPRC Ex Ante Paper on Indicators* (March 2014).

Consequently, result indicators and targets are being developed in line with qualitative methodologies to generate baselines of conditions at the start of the Programme period, a mid-term assessment of progress and result targets. The proposed methodology aims to be replicable for monitoring purposes; proportionate to the Programme's resources; in line with Programme goals and based around definitions of key terms and indicators used by the Programme.

The proposed methodology comprises of four main elements:

Figure 1



These elements allow for the final result baselines, and subsequent assessments of progress, to draw on data that is triangulated, thus ensuring more robust, rigorous assessments.

1. Issues review

The review will draw on existing sources to establish an overview of agreed conditions in the Programme area. In the case of establishing baselines and result targets, the review can draw on a number of sources, including the Programme's own analysis of development needs, which draws on a wide variety of reliable sources and the views of external actors and stakeholders and the ex ante evaluation team's assessment of thematic interests and opportunities in the Programme area. Subsequent reviews to monitor progress can draw on annual reports and on-going evaluation evidence. The review will focus on identifying the key issues in relation to each indicator, most notably:

(for baselines and targets)

- Past experience of transnational action in relevant field
- Relevant forecasts and trends
- Scope for transnational solutions/approaches
 - Specific needs/barriers
 - Key areas of strength/opportunity

(for monitoring purposes)

- Overview of transnational action in relevant field (2014 +)
- Annual Report

The aim here is not to open a debate on the issues being addressed by the Programme, but simply to provide additional thematic insights and detail to inform subsequent phases of the research. For future monitoring purposes, it is recommended that Programme reports and evaluations are also considered. This review will also allow the range of external factors that can influence change to be factored in and considered.

2. Questionnaire

Based on the issues review a short, targeted questionnaire can be developed for circulation to relevant participants. Participants will be thematic experts.

At this stage, it is possible to build in a more quantitative aspect to the work. This will be achieved using a rating system (scale of 1-5) to 'quantify' relevant elements, previously identified in the issues review. Building in a more quantitative element to the overall approach allows for greater comparability.

The precise wording of the questions set will depend on the finally agreed indicators. However, it is possible to provide examples of the types of question:

- How do you rate the area's performance/capacity in? (rating scale)
- Pattern/direct of recent change in performance/capacity...?
- What do you consider to be the main barriers/obstacles, please rate....?
- What do you consider the main strengths and opportunities...?
- What role has transnational cooperation had in delivering change in ...? (rating scale)

- Expert view on what can be achieved by the Programme (with a view to target setting).
- What factors outside Programme actions could affect change?

More specifically for each priority area knowledge of the following:

| Priority | Specific objectives | Expertise |
|----------|---|--|
| 1 | 1.1 Develop new or improved knowledge partnerships between businesses, knowledge institutions, public administrations and end users with a view to long-term cooperation (post project) on developing products and services | knowledge partnerships innovation systems cluster & innovation networks innovation support to SMEs triple helix cooperation |
| | 1.2 Enhance regional innovation support capacity to increase long-term innovation levels and support smart specialization strategies | smart specialization regional innovation strategies public policy engagement in innovation SME support |
| | 1.3 Stimulate the public sector to generate innovation demand and innovative solutions for improving public service delivery | innovative public service provision public service demand and planning role of ICT in public sector working |
| 2 | 2.1 Promote the development and adoption of products, services and processes to accelerate greening of the North Sea Region economy | green and blue technology energy efficiency renewable energy low-carbon technology |
| 3 | 3.1 Demonstrate new and/or improved methods for improving the climate resilience of target sites | climate change adaptation strategies flood prevention and water management sustainable environmental management |
| | 3.2 Develop new methods for the long-term sustainable management of North Sea ecosystems | integrated environmental management and protectionland use planning |
| 4 | 4.1 Develop demonstrations of innovative and/or improved transport and logistics solutions with potential to move large volumes of freight away from long-distance road transportation | green transport solutions regional and city logistics TEN-T Freight transport Integrated transport planning Multi-modal transport Marine transport in the N. Sea |

Surveys can suffer from low response rates and, if circulated, too widely, not all respondents are equally well informed. Therefore, the aim is to focus on a selected group of respondents and use the questionnaire as a preliminary, preparatory step in advance of a more in depth interview. For monitoring purposes, using the same respondents, or at least respondents from within the same institutions, should be used if possible.

For monitoring purposes, using the same respondents, or at least respondents from within the same institutions, should be used if possible. Key criteria for participation include:

• Relevant thematic expertise

- Knowledge and understanding of the scope and scale of transnational cooperation activities, preferably some previous involvement with the Programme.
- Knowledge of national context in relevant field
- Good spoken English.⁴²

It is important to establish a 'neutral', non-biased view, especially for Programme monitoring, thus potential conflicts of interest on the part on respondents is important. Yet, a thorough analysis of conditions does require specialist knowledge and input of the Programme area as a whole and of the Programme's actions. This suggests that some respondents will have (or may have in the future) some connection to the Programme. These links will be taken into account by the research team.

⁴² adapted from CENTRAL EUROPE 2020 Programme, Concept for establishing result indicator baselines and measuring progress.

3. Expert panel interviews

A final stage will be elite interviews of thematically and area-relevant groups of experts to finally establish an agreed baseline position/indicator for the Programme area and proposed targets. The interviews could be.

- structured around a standardised interview schedule, which captures the key relevant issues, and definitions of the prevailing conditions;
- target experts working in fields in relevant to Programme's Priority Axes;
- use participatory appraisal approaches to generate statements and understandings which can be used to inform the baselines, by involving experts that have an appreciation of/have been involved in transnational cooperation in the Programme area;
- incorporate input from experts in all of the NSRP Member States; and
- provide comparable data by using a structured interview schedule.

Questions will focus on:

- Perceived overall strengths and weaknesses in relation to topic covered by the indicator, e.g.;
 - Where relevant, areas where transnational cooperation has made a contribution in the past and where this can be extended in the future; and
 - $\circ\,$ Core components of the indicator and how they are perceived.

The interviews will be geographically and thematically representative. A briefing note and short introductory questionnaire will have been circulated to each respondent in advance of a more in-depth phone interview using a structured interview schedule. Data will be aggregated and processed using textual analysis and clustering around key emerging themes.

4. Presentation of findings

The data analysis will be presented in a report to accompany the baselines set. The report will provide a detailed note on the methodology, set out key conclusions, and identify any challenging and divergent views and explain how these are reflected/reconciled in the analysis.

Figure 2: Overall approach to establishing baselines and targets



DRAFT TIMESCALE

The implementation schedule for the work will very much depend on pace the Programme drafting process and formal negotiations with the European Commission. However, an indicative outline is as follows for the period February- approx. November 2014, but the final deadline will depend on the dates of OP submission and approval. Please note that a start date of February has been retained as work on this issue has already commenced.

| February | March | April | May | June | July | August | Sept | Oct | Nov + |
|---|-------|-------|------------|-----------------------------------|-------------------------------|--------------------------------|---|-----|-------------------------|
| Work on establishing focus of results indicators | | | | | | | | | |
| | | Dev | elop metho | dology for dat | ta gathering | | | | |
| | | | | Possible OP submissio n? | | | | | |
| | | | | L | Identify exp interviewees/ | erts to act as /respondents | | | |
| | | | | Set result targets | | | | | |
| | | | | | | | Following Commission approval of indicator approach finalise expert interviews | | |
| | | | | | | | | | Set result baselines |
| | | | | | | | | | Set result targets |
| | | | | | | | | | |
| | | | | | | | | | Final Report |

41. ANNEX 32 - PERFORMANCE FRAMEWORK WITH TECHNICAL ASSISTANCE TARGETS

The framework for TA is an optional requirement for the programme and cannot be entered in the regular SFC 2014 system. It has been decided, however, to use and submit these TA targets as a basic internal management tool.

| Priority axis | Indicator type | ID Indicate implem step | or or key nentation | Measurement unit, where appropriate | Milestone to achieve by 31.12.18 | Final target (2023) | Source of data | Explanation of relevance of indicator, where appropriate |
|---------------|-------------------------------|---|---|---|--|------------------------|-------------------------|---|
| 1 | Financial indicator | Total e expend incurre benefic entered accour system Certifyi Authori | ligible diture d by ciaries and d in the nting n of the ing ity ⁴³ | EUR million (ERDF + co- financing) | 17,080,000 | 100% | Certifying Authority | Compulsory financial indicator for all priorities |
| 1 | Key implementation step | Numbe applica receive assess | er of itions ed and ied | Nr. of applications | 27 | 5444 | Monitoring system | Reflects programme ability to attract committed beneficiaries |
| 1 | Output ⁴⁵ | Numbe enterpr | er of rises | Enterprises | NA | 500 | Monitoring system / | |

⁴⁴ All targets for number of applications are based on (i) Estimated number of projects based on future budget and average budget/project in the 2007-2013 period and (ii) an approx. 50% approval rate as in the 2007-2013 period

⁴⁵ All outputs are selected from the priority output indicators. The selected outputs must cover the majority of spending under the priority

| | | cooperating with assisted research institutions | | | | project reporting | |
|---|------------------------|---|--|------------|------|--|--|
| 1 | Output | Number of improved or new innovation support measures launched for businesses | Measures | NA | 21 | Monitoring system / project reporting | |
| 1 | Output | Number of improved or new innovation support measures launched for public service delivery | Measures | NA | 21 | Monitoring system / project reporting | |
| 2 | Financial indicator | Total eligible expenditure incurred by beneficiaries and entered in the accounting system of the Certifying Authority ⁴⁶ | EUR million (ERDF + co- financing) | 16,470,000 | 100% | Certifying Authority | Compulsory financial indicator for all priorities (see Guidance Fiche p.5) |
| 2 | Key implementation step | Number of applications received and assessed | Nr. of applications | 15 | 30 | Monitoring system | Reflects programme ability to attract committed beneficiaries |
|---|-------------------------------|---|---|------------|------|--|---|
| 2 | Output | Number of green products, services and processes piloted and/or adopted | Green products, services, processes | NA | 54 | Monitoring system / project reporting | |
| 3 | Financial indicator | Total eligible expenditure incurred by beneficiaries and entered in the accounting system of the Certifying Authority ⁴⁷ | EUR million (ERDF + co- financing) | 13,420,000 | 100% | Certifying Authority | Compulsory financial indicator for all priorities |
| 3 | Key implementation step | Number of applications received and assessed | Nr. of applications | 13 | 26 | Monitoring system | Reflects programme ability to attract committed beneficiaries |
| 3 | Output | Number of new | Climate change | NA | 21 | Monitoring | |

| | | and/or improved climate change adaptation solutions demonstrated | adaptation solutions | | | system / project reporting | |
|---|-------------------------------|---|--|------------|------|--|---|
| 3 | Output | Number of sites managed using new solutions supporting long- term sustainability | Sites | NA | 35 | Monitoring system / project reporting | |
| 4 | Financial indicator | Total eligible expenditure incurred by beneficiaries and entered in the accounting system of the Certifying Authority ⁴⁸ | EUR million (ERDF + co- financing) | 10,370,000 | 100% | Certifying Authority | Compulsory financial indicator for all priorities |
| 4 | Key implementation step | Number of applications received and assessed | Nr. of applications | 20 | 40 | Monitoring system | Reflects programme ability to attract committed beneficiaries |
| 4 | Output | Number of new | Green transport | NA | 54 | Monitoring | |

| | | and/or improved green transport solutions adopted | solutions | | | system / project reporting | |
|---|-------------------------------|---|--|-----------|-------------------|----------------------------------|--|
| 5 | Financial indicator | Total eligible expenditure incurred by beneficiaries and entered in the accounting system of the Certifying Authority ⁴⁹ | EUR million (ERDF + co- financing) | 3,660,000 | 100% | Certifying Authority | Compulsory financial indicator for all priorities (see Guidance Fiche p.5) |
| 5 | Key implementation step | Number of reports checked and paid | Number of reports | 40 | 300 ⁵⁰ | Monitoring system | Monitoring projects and paying out funds is one of the core tasks of the programme bodies during a more advanced stage of the programme life cycle |
| 5 | Key implementation step | Number of beneficiaries in approved projects | Number of beneficiaries | 450 | 93951 | Monitoring system | Reflecting the success of efforts to promote the |

 ⁵⁰ Based on 4 reports per approved project
⁵¹ Extrapolated from IVB figures

| | | | | | | | programme to relevant target groups |
|---|-------------------------------|---|---|-----|--------------------|----------------------|--|
| 5 | Key implementation step | Share of programme funding allocated to projects | Percentage of funds allocated to projects | 60% | 100% ⁵² | Financial reports | A fast allocation of funds to projects is a precondition to fulfill the programme's N+3 targets. It is an indicator particularly important at an early stage of the programme life cycle. |
| 5 | Output | Number of applications received and assessed | No. applications | 100 | 237 | Monitoring system | Shows level of interest in the programme and main implementation progress |
| 5 | Output | % output indicators met | % of output targets | NA | 95% | Monitoring system | Shows that the right projects were selected |

⁵² At programme peak but fluctuating towards programme close based on returned funds and additional allocations

42. ANNEX 33 - FOOTNOTES

Section 1 - Strategy

¹ Regulation (EU) No 1303/2013 of the European Parliament and of the Council of 17 December 2013 laying down common provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund, the European Agricultural Fund for Rural Development and the European Maritime and Fisheries Fund and laying down general provisions on the European Regional Development Fund, the European Social Fund, the Cohesion Fund and the European Maritime and Fisheries Fund and repealing Council Regulation (EC) No 1083/2006 (OJ L 347, 20.12.2013, p. 320).

² Regulation (EU) No 1299/2013 of the European Parliament and of the Council of 17 December 2013 on specific provisions for the support from the European Regional Development Fund to the European territorial cooperation goal (OJ L 347, 20.12.2013, p. 259).

³ This section draws on EPRC's Strategic Review produced for the ex-ante evaluation ⁴ <u>http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Environmental_protection_expenditure</u>

⁵ UN Human Development Index 14 March 2013

⁶ A summary of main points from the full SWOT in Annex 1

⁷ World Resources Institute

⁸ May 2013 EUROSTAT figures. Available at <u>http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Unemployment_statistics_at_regional_level</u>

- ⁹ Norway also performs well but is slightly below the EU average¹. Denmark, Germany and Sweden are three of the four countries that perform much better than the EU average and are therefore termed 'Innovation leaders'. Belgium, the Netherlands and the United Kingdom are at or just above the average and are therefore classified by the European Commission as 'Innovation followers'.
- ¹⁰ These countries form particularly well on *Business R&D expenditures, PCT patent applications, New doctorates graduates, International scientific co-publications* and *Public-private co-publications*. Innovation Scoreboard 2013

¹¹ European Commission, Directorate General for Enterprise and Industry. Innovation Scoreboard 2013

¹² Based on national performance on the indicators for the Innovation Scoreboard

13 Ibid

- ¹⁴ Gazelles are extremely fast growing companies with exceptional growth in turnover and employment for a sustained period.
- ¹⁵ These indicators are *SMEs with product or process innovations, SMEs with marketing or organisational innovations* and *High-growth innovative firms*. Innovation Scoreboard 2013.

¹⁶ Innovation Scoreboard

¹⁷ European Commission, Roadmap to a Resource Efficient Europe

¹⁸ Actual period is 1901-2010. Climate Change 2013, the Physical Science Basis, IPCC

¹⁹ IPCC. Although subject to a small degree of uncertainty, these figures are conservative and the basis of EU policy making

²⁰ Ibid

²¹ Ibid

²² Growth in emission transfers via international trade from 1990 to 2008, Proceedings of the National Academy of the United States of America

²³ Communication from the Commission, A Roadmap for moving to a competitive low carbon economy in 2050

²⁴ ibid

²⁵ UNEP, The Green Economy Initiative

²⁶ 'Remote' and 'core' in the sense of European core-periphery patterns

²⁷ European Environment Agency

²⁸ Currently under negotiation

²⁹ http://people.hofstra.edu/geotrans/eng/ch7en/conc7en/lifespan.html

³⁰ The table contains the programme relevant parts of the Priorities for European Territorial Cooperation included in each of the Commission Services national Position Papers

³¹ Investment in R&D is not the only effective measure of smart growth and the programme will therefore also target other factors than those listed here.

³² See Europe 2020 flagship projects for a detailed analysis of needs

33 Ibid

³⁴ Table taken from North Sea Region Programme Strategic Review produced by EPRC as part of the ex-ante evaluation

³⁵ The table contains the programme relevant parts of the Priorities for European Territorial Cooperation included in each of the Commission Services national Position Papers

³⁶ Janez Potočnik, European Commissioner for Environment, Any Future for the Plastic Industry in Europe?

Table 1 – Thematic objective and investment priority justification

¹ The anti-fouling component tributylin and polychlorinated biphenyls

2.A.5 Specific objectives corresponding to the investment priority and expected results – Priority 1

¹ Drawn from SME performance review study 2012/2013

2.A.6.1 – Type and examples of actions - Priority 1

¹ Deborah Jackson, US National Science Foundation

² Anne Glover, Chief Scientific Advisor to the President of the European Commission (quoted in theparliamnt.com)

³ The Economist 22.02.2014

⁴<u>https://webgate.ec.europa.eu/maritimeforum/system/files/Subfunction%203.6%20Marine%20mineral%20resource_</u> <u>Final%20v120813.pdf</u> ⁵ OECD, SME innovation in a global economy, Conference for Ministers responsible for SMEs and Industry Ministers Bologna, Italy, 14-15 June 2000.

⁶ Taken from Research and Innovation Strategies for Smart Specialisation

⁷ DG MARKT, based on OJ/TED data and Member States' statistical reports

⁸ Pro Inno Europe, Global Review of Innovation Intelligence and Policy Studies, Mini Study 10, Innovation in the public sector

⁹ See the DANS cluster good practice guide for details of these issues

¹⁰ Trends and Challenges in Public Sector Innovation in Europe

¹¹ See for example Manchester Institute of Innovation Research <u>http://innovation-policy.net/compendium/section/Default.aspx?topicid=29§ionid=137</u>

2.A.5 Specific objectives corresponding to the investment priority and expected results – Priority 2

¹Karl Burkart <u>http://www.mnn.com/green-tech/research-innovations/blogs/how-do-you-define-the-green-economy</u>

²Manifesto for a Resource Efficient Europe. 17.12.2012

2.A.6.1 – Type and examples of actions - Priority 2

¹ Drawn from WWF Living Planet Report 2012

² EU 2020 Flagship Initiative 'An industrial policy for the globalization era

³ Europe 2020 . Sustainable Growth – promoting a more resource efficient, greener and more competitive economy

⁴ The 2012 Global Green Economy Index.Dual Citizen Inc. It should be noted that Belgium is not included in this analysis. Based on investment volume, cleantechcommercialisation, cleantech innovation and cleantech investment and export promotion

⁵ Connecting Smart and Sustainable Growth through Smart Specialisation

⁶ Based on 2011 monitoring of the EUROSTAT sustainable development indicators

⁷ Connecting Smart and Sustainable Growth through Smart Specialisation

⁸ Karl Burkart <u>http://www.mnn.com/green-tech/research-innovations/blogs/how-do-you-define-the-green-economy</u>

⁹ Manifesto for a Resource Efficient Europe. 17.12.2012

¹⁰ Bureau de RecherchesGeologiques et Minieres

¹¹ Macroeconomic modelling of sustainable development and the links between the economy and the environment, GWS.Quoted in Action for a Resource Efficient Europe, June 2013.

¹² <u>http://epp.eurostat.ec.europa.eu/portal/page/portal/sdi/indicators/theme2</u>

¹³ See OECD Environmental Policy Tools and Evaluation

¹⁴ These recommendations are largely drawn from the EREP recommendations

¹⁵ Towards the Circular Economy: an economic and business rationale for an accelerated transition. McKinsey & Company for Ellen MacArthur Foundation. 2012. p. 60

2.A.2 – Justification for a priority containing multiple thematic objectives – Priority 3

¹ Draws on DG Environment, Nature's role in climate change

2.A.5 Specific objectives corresponding to the investment priority and expected results - Priority 3

¹ One Step Beyond Implementation of Climate Adaptation Innovations – Experiences from the Interreg IVB project Watercap

² <u>http://climate-adapt.eea.europa.eu/web/guest/adaptation-strategies</u>

2.A.6.1 – Type and examples of actions - Specific objective 3.1

¹ Handbook on financing biodiversity in the context of the European Fund for Regional Development, Interreg IVC SURF Nature project.

2.A.6.1 – Type and examples of actions - Specific objective 3.2

¹ Draws heavily on DG Maritime Affairs published proposals for maritime spatial planning

² See for example DG Fisheries and Maritime Policy <u>Communication from the Commission: Blue Growth opportunities</u> for marine and maritime sustainable growth

³ See <u>http://ec.europa.eu/maritimeaffairs/policy/blue_growth/</u>

2.A.6.1 – Type and examples of actions - Priority 4

¹ DG Move, EU Transport in Figures – Statistical pocketbook 2013

² Transport White Paper

³ Article 50, Regulation (EU) 1315/2013 on Union guidelines for the development of the trans-European transport network and repealing Decision No 661/2010/EU

⁴ For example the European rail traffic management system (ERTMS), maritime surveillance systems (SafeSeaNet), Intelligent Transport Systems (ITS) etc.

⁵ North Sea Region 2020. North Sea Commission Strategy – Contributing to Europe 2020

⁶ European Commission White Paper, Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system

⁷ Innovation in Urban Mobility – Policy making and planning

⁸ Transport Energy Efficiency, Implementation of IEA Recommendations since 2009 and next steps. International Energy Agency Information Paper, Kazunori Kojima and Lisa Ryan

⁹ European Commission White Paper, Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system

¹⁰ European Commission White Paper, Roadmap to a Single European Transport Area – Towards a competitive and resource efficient transport system

2.A.7 – Performance Framework

¹ All targets for number of applications are based on (i) Estimated number of projects based on future budget and average budget/project in the 2007-2013 period and (ii) an approx. 50% approval rate as in the 2007-2013 period

 2 All outputs are selected from the priority output indicators. The selected outputs must cover the majority of spending under the priority

Section 4 - Integrated approach to territorial development

¹ Jan Vogelij, Definition of Territorial Cohesion, European Council of Spatial Planners

² Taken from <u>http://ec.europa.eu/regional_policy/what/cohesion/index_en.cfm</u> with modification of the third bullet point

³ Jan Vogeli, Spatial planning towards territorial cohesion, European Council of Spatial Planners

⁴ Territorial Agenda of the European Union 2020, page 3

4.4 –Contribution to macro-regional and sea-basin strategies

¹ North Sea Region 20202: North Sea Commission Strategy - Contributing to the Europe 2020, August 2013.

² Website reference: <u>http://ec.europa.eu/maritimeaffairs/policy/sea_basins/index_en.htm</u>

Section 6 - Coordination

¹ EPRC: Ex ante evaluation of the North Sea Region Programme: Coherence and Coordination

² EPRC: The ex-ante evaluation of the North Sea Region Programme: Strategic Review

³ Regulation (EU) 1291/2013 Establishing Horizon 2020 – The Framework Programme for Research and Innovation (2014-2020), Article 5.

⁴ Council of the European Union, Council approves programme in support of SMEs, press release 544, 5 December 2013.

⁵ Regulation (EU) 1288/2013 Establishing 'Erasmus +': the Union programme for education, training, youth and sport

⁶ Decision of the European Parliament and of the Council on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet", 2012/0337, LEX 1388, pp. 12-13.

⁷ Ibid, p. 49.

⁸ Regulation (EU) 1291/2013 Establishing Horizon 2020

⁹ Regulation (EU) 1305/2013 On support for rural development by the European Agricultural Fund for Rural Development (EAFRD), article 3.

¹⁰ Amended Proposal for a Regulation on the European Maritime and Fisheries Fund, COM(2013): 245 Final, p. 5.

¹¹ Regulation (EU) 1293/2013 On the establishment of a Programme for the Environment and Climate Action (LIFE), article 19, article 24,

¹² Ibid, article 1 G.

¹³ Decision of the European Parliament and of the Council on a General Union Environment Action Programme to 2020 "Living well, within the limits of our planet", 2012/0337, LEX 1388, p. 2.

¹⁴ Regulation (EU) 0302/2011 Establishing the Connecting Europe Facility, p. 14.

¹⁵ Regulation (EU) 1315/2013 Union Guidelines for the development of trans-European network, article 50.

- ¹⁶ HORIZON 2020 Work Programme 2014-2015: 11. Smart, green, and integrated transport, European Commission Decision C (2013)8631, p. 11, p. 14, p. 23 and p. 46.
- ¹⁷ European Commission, New support for sustainable urban development in the European Neighbourhood, press release, Brussels, 30 August 2013.

¹⁸ Strategic Orientation Report, EPRC: The ex-ante evaluation of the North Sea Region Programme 2014-2020

¹⁹ European Commission: Integrated Territorial Investment (ITI), Cohesion Policy 2014-2020, Fact Sheet, p. 2.

8.1 – Sustainable development

¹ Eurostat: Statistical books: Sustainable Development in the European Union: Key message, 2013.

² European Commission: Communication on the Review of the Sustainable Development Strategy: A Platform for action COM(2005): 658 final, pp. 4-25.

³ European Commission: Communication on a Roadmap for moving to a Competitive Low Carbon Economy in 2050 (COM(2011): 112 final, pp. 1-15.

⁴ European Commission: Communication on the Roadmap to a Resource Efficient Europe COM(2011): 571 final), p. 3.

⁵ European Commission: Social Agenda: Employment and Social Innovation, November 2013, p. 8 and p. 14.

⁶ European Commission: Communication on a renewed strategy 2011-2014 for Corporate Social Responsibility, COM(2011): 681 final, p. 5 and p. 7.

8.2 Equal opportunities and non-discrimination

¹ EPRC: Ex ante evaluation of the North Sea Region Programme 2014-2020: Ex ante update paper, February 2014, p. 18.

² European Commission: The social dimension of the Europe 2020 strategy: A report of the social protection committee (2011), p. 12.

³ Ibid, p. 35.

⁴ European Union rules to tackle discrimination on grounds of racial or ethnic origin, religion or belief, disability, age and sexual orientation have now been implemented by all Member States in national law (European Commission: Press release: EU rules to tackle discrimination now in place in all 28 EU Member States, Brussels, 17 January 2014.

8.3 Equality between men and women

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² EC: Boosting equality between women and men in the EU: Key actions and figures, March 2014, p. 4.

³ European Commission: Press release: Equal pay day: Gender pay gap stagnates at 16.4% across Europe.

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