

***Assessment of low carbon measures in
development programmes : lessons learnt from
some European Regional Development
Programmes (ERDF)***

François Levarlet

(environmental economist)

T33 Sound policy - Italy

f.levarlet@t33.it

www.t33.it

Agenda

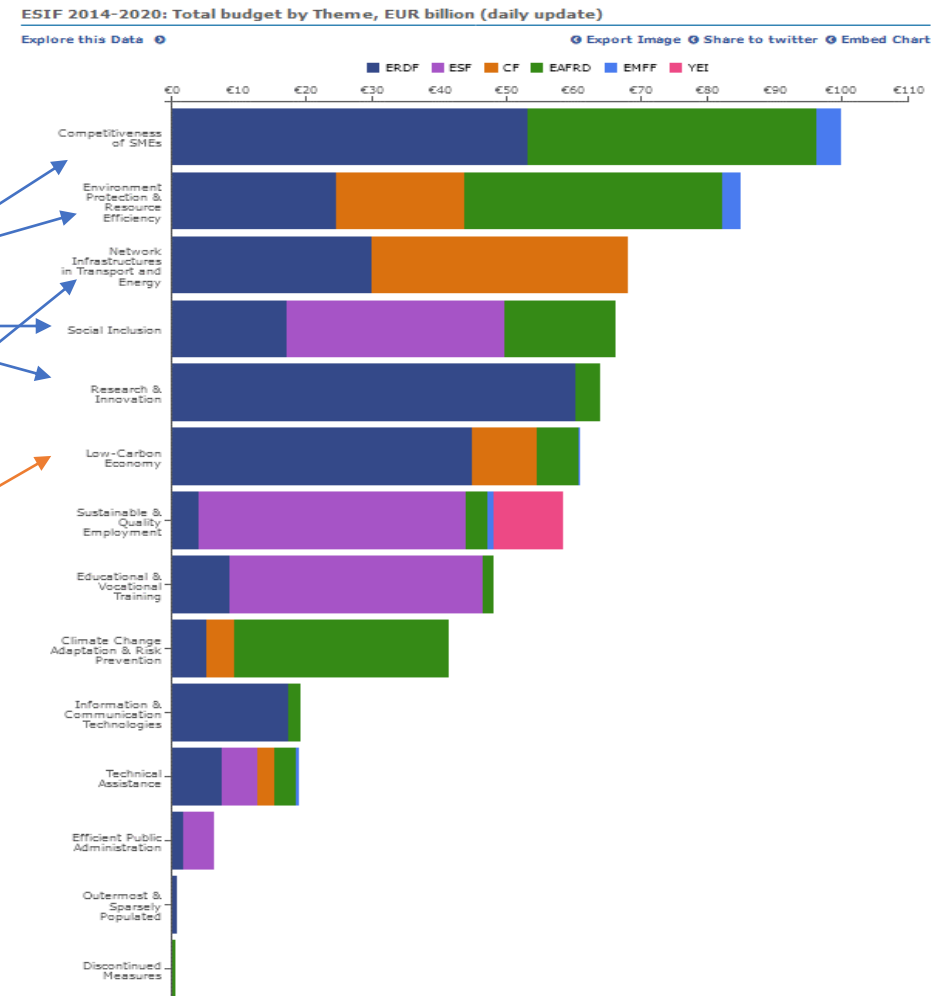
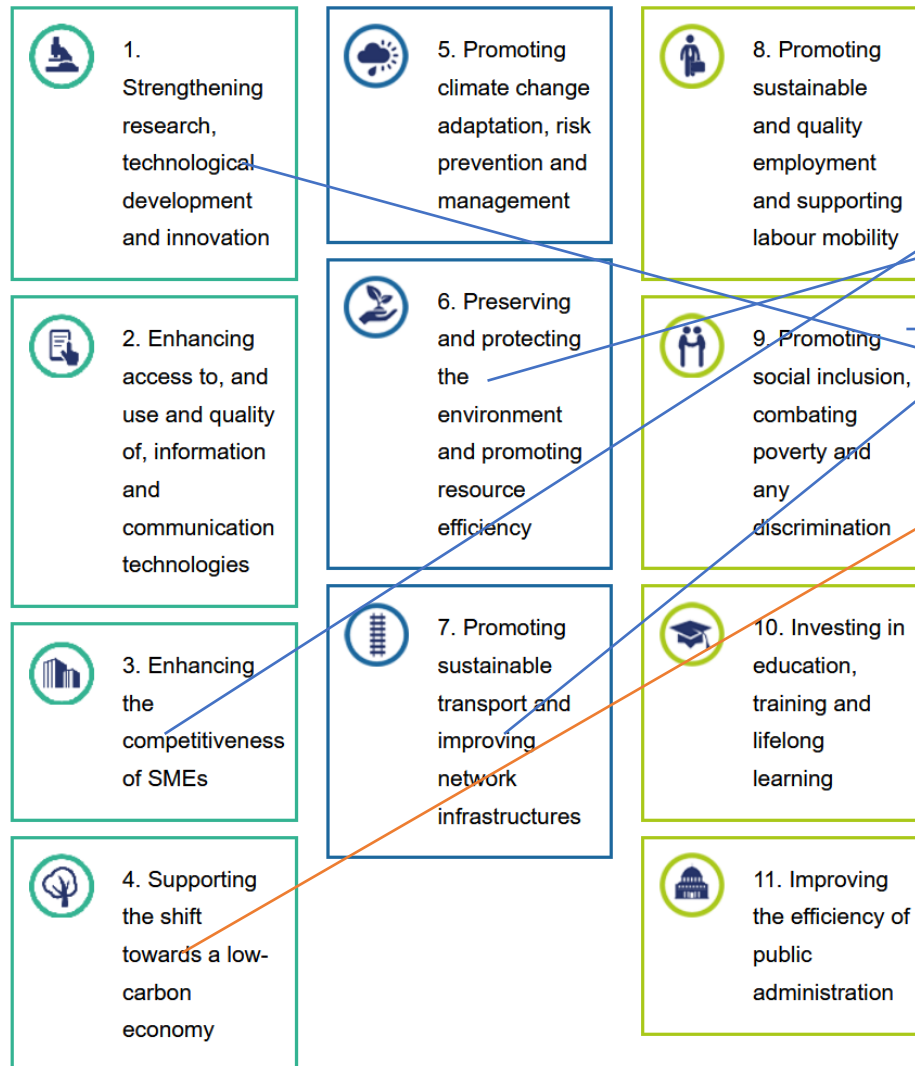
- Overview of ESIF programmes
- Strategic Environmental Assessment (SEA) in ERDF regional programmes
- Low carbon economy (LC) in a SEA
- Conclusion

CPI – overview of ESIF programmes (2014-2020)

- European Structural and Investment Funds (ESF, CF, EARDF, EMFF + Y&I), supporting Cohesion Policy (art. 174 of the Treaty – addressing the disparities of regional development in the EU MS)
- More than 500 national and regional programmes - 638 billions over a 6 years period
- Development issues from infrastructures to training, from innovation to environment and social inclusion (11 thematic objectives)
- “Supporting the shift towards a low-carbon economy” is one of the thematic objective (TO 4)

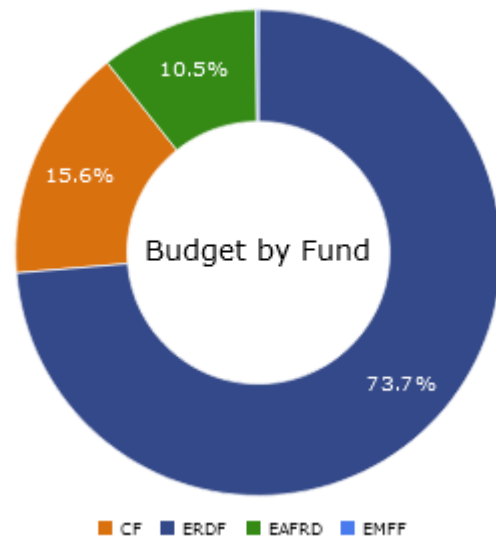
CP2 – Thematic objectives

Source: <https://cohesiondata.ec.europa.eu/>



CP3 - Low carbon economy (TO 4)

61 billion € - 10 % ESIF



Type of interventions related to low carbon economy:

- Renewable energy
- Energy efficiency in buildings
- Energy planning, including urban planning

Other TOs dealing with climate change mitigation (but not TO4)

- **TO1** - Research and innovation (low-carbon technologies)
- **TO3** – Competitiveness (Financial support to the low carbon economy, circular and bio-economy)
- **TO6** - Environment (carbon sink, land use)
- **TO7** – Sustainable Transports
- **TO10** - Education and training

CP4 – Example of Low carbon priority in Two Seas – Interreg France, UK, Netherlands and Belgium (ERDF)

<https://www.interreg2seas.eu/en/content/low-carbon-technologies>

Programme interventions

- Development of comparative pilots actions to test and demonstrate innovative low-carbon technologies and applications
- Adoption by stakeholders of low-carbon technologies to increase the use of energy from renewable sources.
- Adoption by stakeholders at different territorial and administrative level of identical or similar innovative low-carbon technologies to reduce their CO2 emissions
- Prepare for investments in the further roll-out of low-carbon technologies
- Investments to realise innovative small-scale infrastructures for renewable energy generation, production and distribution

12 LC Projects funded

- MOBI-MIX: Improved implementation of shared mobility and MaaS to increase up-take of low-carbon transport in cities.
- ISHY : Implementation of Ship Hybridisation
- SHIFFT: Sustainable Heating: Implementation of Fossil-Free Technologies
- SOLARISE : Solar Adoption Rise in the 2 Seas
- SLIC : Smart light concepts
- PECS: Ports Energy and Carbon Savings
- BISEPS : Business Cluster Integrated Sustainable Energy Packages
- And More: https://www.interreg2seas.eu/en/listing-approved-project?search=&axis=1227&p_axis=All&states=All&field_pays_tid=All

SEAI – SEA in an ERDF 2014-2020 programming context

- SEA is a section of the ex-ante evaluation ; with guidance from DG Regio
- Stakeholders involved are : programme MA,AA and other stakeholders in the MC
- Duration of the process is 6-9 months (which is very short ...)
- Territorial units: of analysis Nuts 2 and/or Nuts 3 (intermediate territorial level ...)
- Main deliveries: a scoping report, environmental reports + a public consultation
- Follow-up activities are required (i.e. monitoring and evaluation in the implementation period)

SEA2 – Steps of SEA with LC measures

Situation analysis

- CO2 emissions,
- Energy consumption
- Energy efficiency of Building
- Energy balance, including renewables

Environmental objectives of the area

- At EU, national level
- Regional planning

Alternatives

- e.g. in terms of CO2 emissions

Direct and cumulative effects

Mitigation actions (selection criteria)

- Energy efficiency actions (e.g. increase class of energy saving in buildings)
- Renewable energy consumption (e.g. in industry)
- Sustainable transport (e.g. for urban sustainable development actions)

Monitoring plan and follow-up

- Indicators (context, process, contribution)
- Monitoring arrangements

SEA3 – Assessment tools and data sources

Two ways for an assessment of the environmental effects of LC measures:

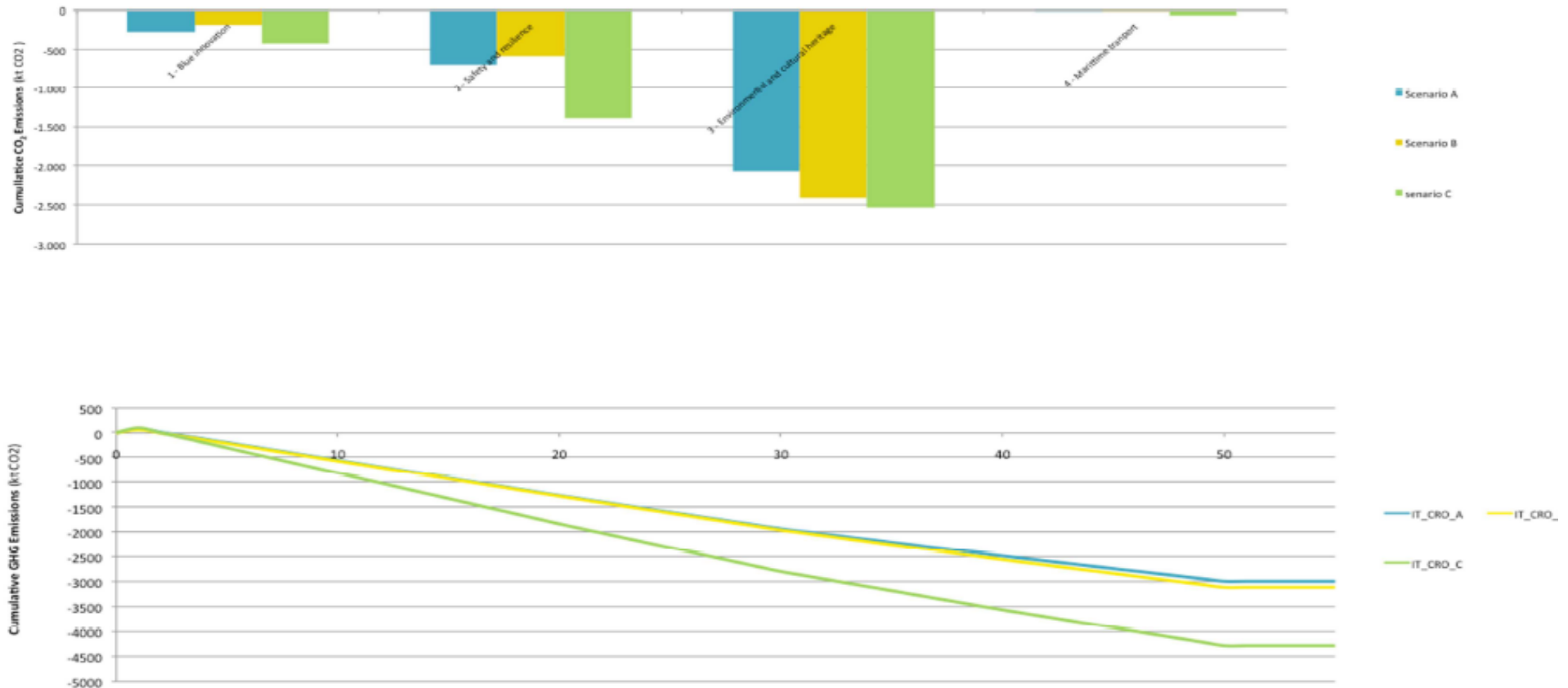
- Quantitative approach: through indicators and modelling
- Qualitative approach: based on guidance and specific sector and impact analysis

(In general: sources and tools have improved over the past 20 years – current key issues are more related to data selection)

SEA4 - Quantitative analysis with the CO2MPARE model - example.

https://ec.europa.eu/regional_policy/en/information/publications/guides/2013/co2mpare-co2-model-for-operational-programme-assessment-in-eu-regions-improved-carbon-management-with-eu-regional-policy

Figure 23: CO2MPARE Model for the CP Italy-Croatia, according with three different scenarios.



SEA5 – in conclusion (I)

SEA is useful in the programme drafting process, especially when it comes to mitigation actions and indicators for monitoring

Definition of mitigation actions:

- At the end of the programme drafting (when actions are defined)
- Useful for the definition of project selection criteria and tendering procedure

Definition of indicators:

- When close to programme actions and outputs/results
- With monitoring arrangements
- With a budget plan (a pre-condition for the programme following-up)

SEA5 – in conclusion (2)

SEA is more challenging for ERDF programmes when it comes to:

- Definition of LC alternatives (i.e. usually there are not related to environmental considerations)
- Definition of the logic of intervention (i.e. programme priorities are set at a more higher political level)
- Related to the financial allocation to the programme priorities (i.e. often decided based on socio-economic considerations)
- Quantification of impact indicators, such as the programme or project carbon footprint (very challenging especially for certain types of non-material projects)

Thank you for your attention!

François Levarlet

For your information some of our SEAs are published on the following platforms:

<https://www.interreg2seas.eu/en/content/about-programme>

https://www.italy-croatia.eu/docs-and-tools#docsTools_42271

<https://www.channelmanche.com/en/programme/useful-documents/>

Break out A

- How can the SEA contribute to **reduction of energy and resource consumption** in order to improve positive environmental impacts on global climate change considering
 - the production
 - but also the whole lifespan of the economies and their outcomes
 - as well as related life-style involving aspectsthrough a **cross-sectoral perspective**?
- How can we enhance system thinking in SEA in this context?
- How can SEA affect the decision-making in terms of early consideration of mitigation targets and integrative consideration of cross-sectoral perspe