SIRIS A·C·A·D·E·M·I·C

[Tools for the localization of the SDGs]

Identification of SDG-related science and innovation activities and actors,

to support priority-setting and stakeholder mobilisation at the local and regional level

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"**Science, technology and innovation strategies (STI)**" were adopted as "integral elements of [...] national **sustainable development strategies** [...]"

Addis Ababa Action Agenda
United Nations, 2015

Agenda 2030 ⇔ STI

1. *Top down:* Policy priority-setting in the framework of the SDGs

2. *Bottom-up:* Institutional aim to contribute to the SDGs

STI policy ⇔ **Strategies / portfolios of STI actors**

STI for SDGs: Challenges at the local and regional level

- How to **identify science and innovation actors/skills** in SDG-related topics
- How to **set priorities at the local level**, connected with global challenges
- How to **mobilise actors towards SDG-oriented innovation** and collaboration

How to identify science and innovation actors/skills in SDG-related topics

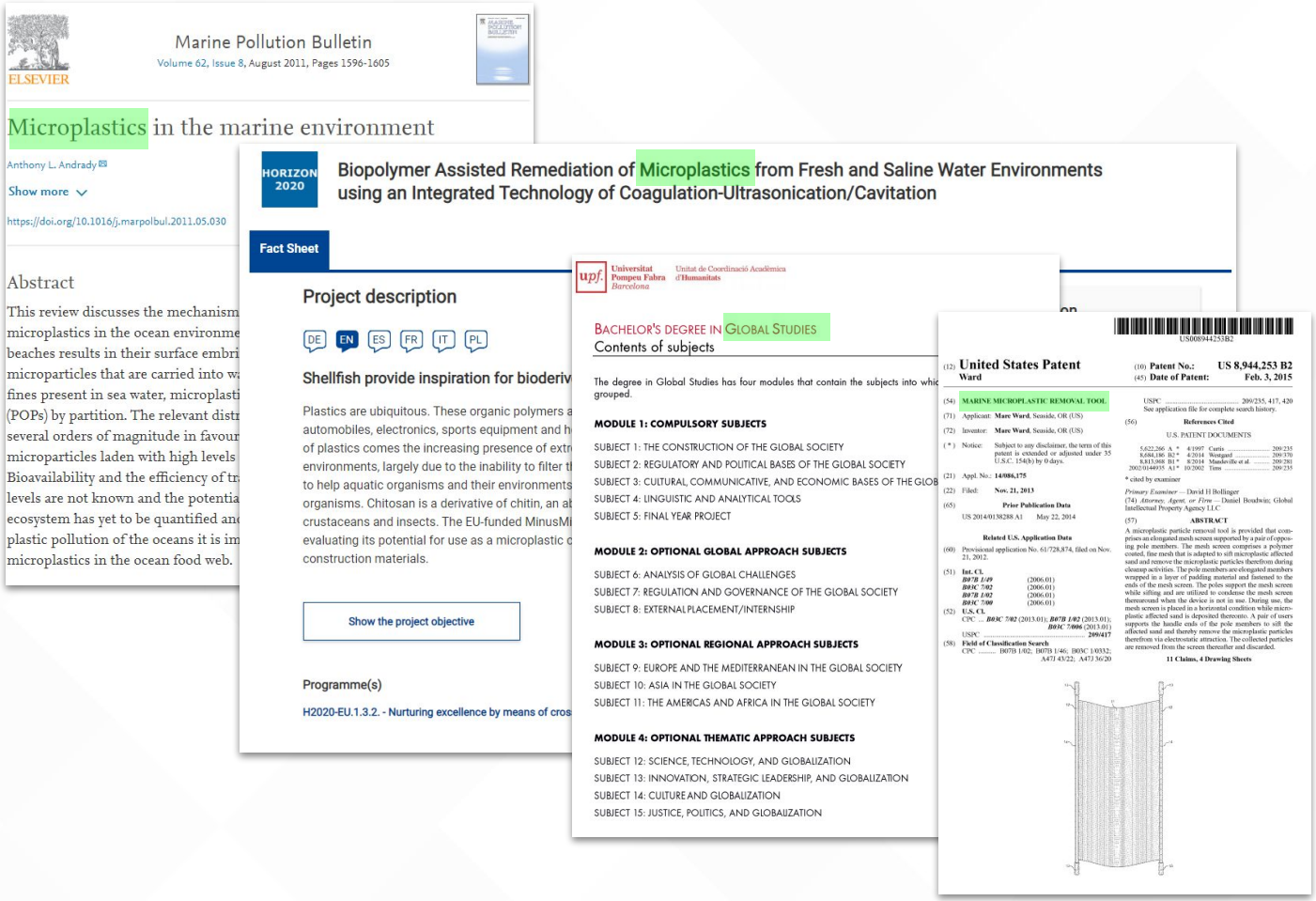
SIRIS ACADEMIC

Scientific publications

Projects and grants

Higher education course syllabus

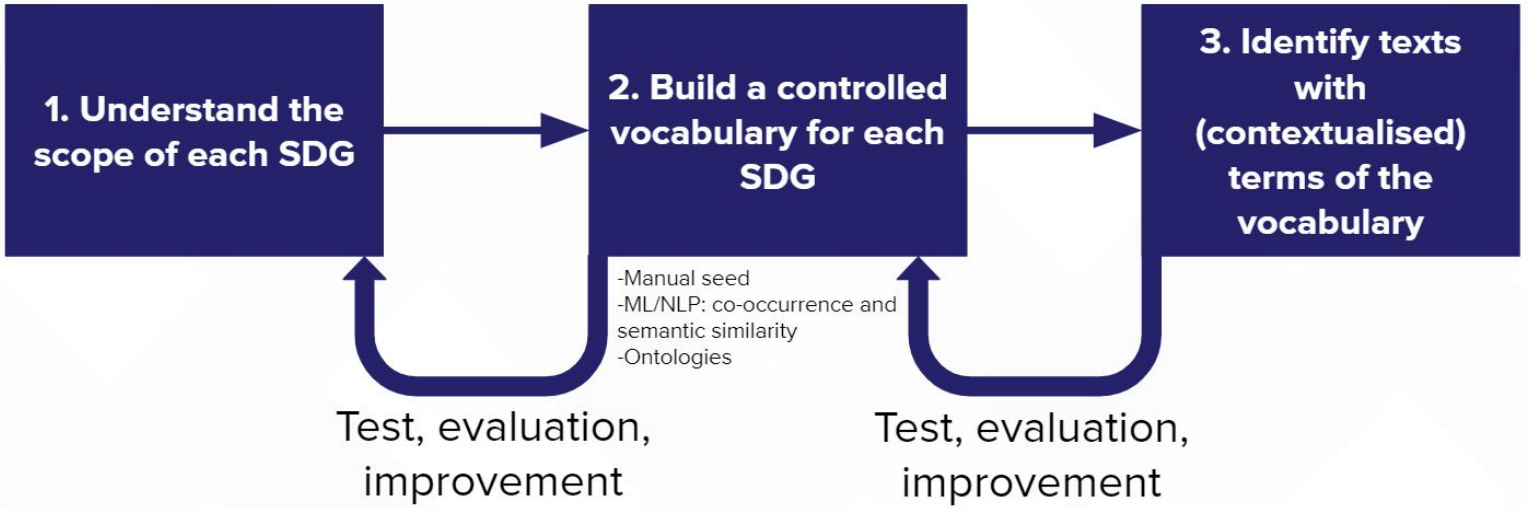
Patents



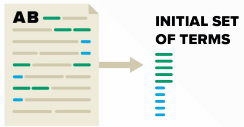
"A **controlled vocabulary** (CV) is a carefully selected **list of words and phrases**, which are **used to tag units of information** (such as documents) so that they may be more easily retrieved by a **search**."

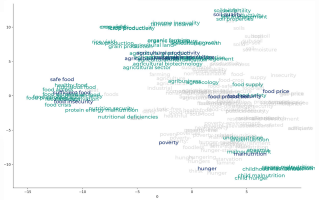
Amy Warner

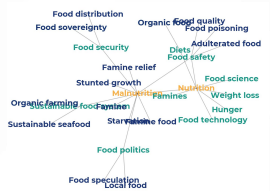
Process: Building a controlled vocabulary to identify SDG related STI activities



Manual extraction of key terms







Result: Building a controlled vocabulary to identify SDG related STI activities

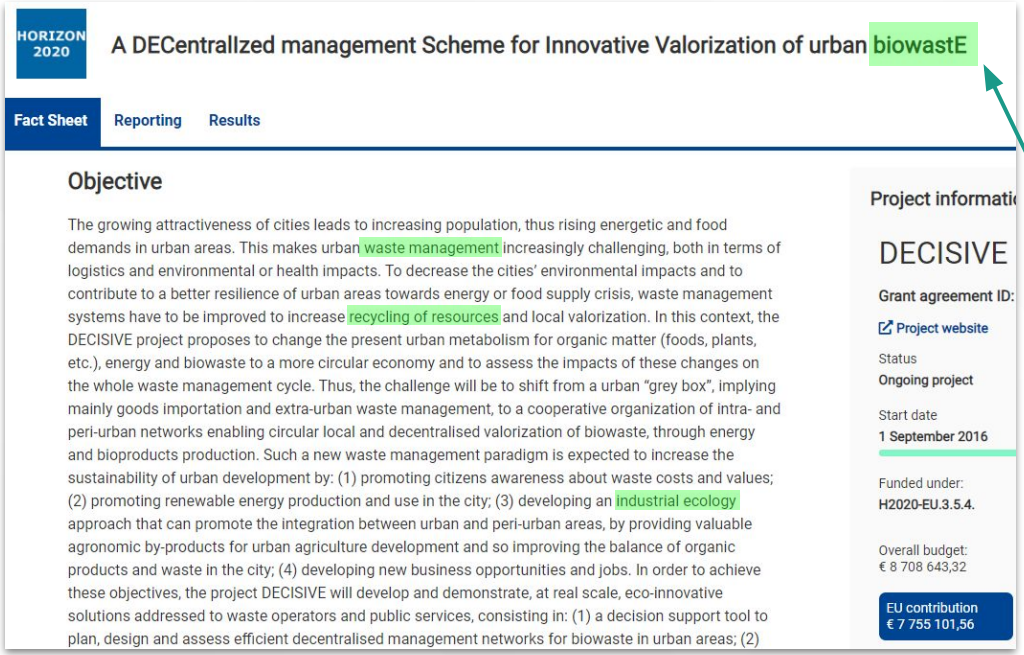
SDG	N. words	Words with contextualisation
SDG 1	102	40
SDG 2	121	17
SDG 3	628	151
SDG 4	114	59
SDG 5	133	33
SDG 6	291	133
SDG 7	206	22
SDG 8	146	58
SDG 9	268	99
SDG 10	110	65
SDG 11	275	95
SDG 12	153	44
SDG 13	301	20
SDG 14	163	49
SDG 15	186	31
SDG 16	297	33
Grand Total	**3494**	**949**

SDG 12 - Responsible consumption and production

keyword	extra
biodegradable bag	
biotic material	sustainable|affordable|reliable
biowaste	
circular economy	
closing the loop	Sustainable|ecological|equitative
compost	Sustainable|ecological|equitative
compost pile	

...

Result: Building a controlled vocabulary to identify SDG related STI activities



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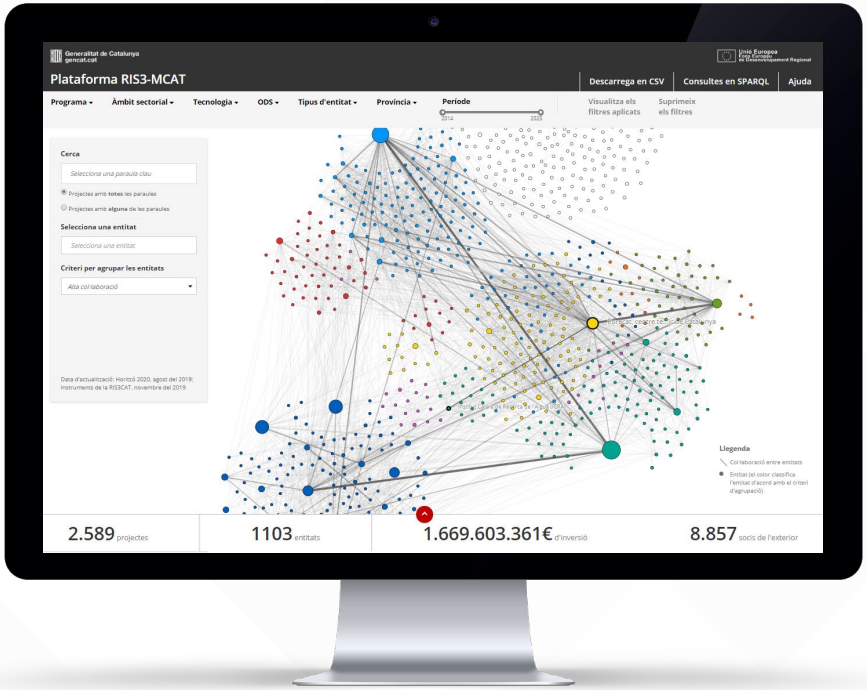
Application in a region

1. **Generalitat de Catalunya -**
   Catalan Smart specialisation strategy (RIS3CAT)

Science and innovation policy - Catalan smart specialisation strategy (RIS3CAT)

Articulating shared agendas for sustainability and social change supported by R&I



2,890 **H2020 and ERDF-funded**

Research and innovation projects

Classified into the SDGs

Generalitat de Catalunya

Unió Europea
Fons Europeu
de Desenvolupament Regional

http://ris3mcat.gencat.cat/#

Mapping Platform of the Research and Innovation Strategy for Smart Specialisation of **Catalunya** (RIS3CAT)

[Project]

Bringing Local and Sustainable Produce Back to the City

[Project]

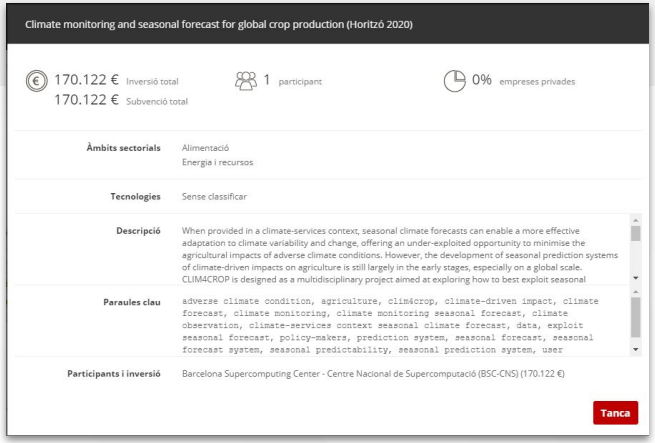
Climate monitoring and seasonal forecast for global agricultural production

[Project]

Bringing Local and Sustainable Produce Back to the City

[Project]

Climate monitoring and seasonal forecast for global agricultural production



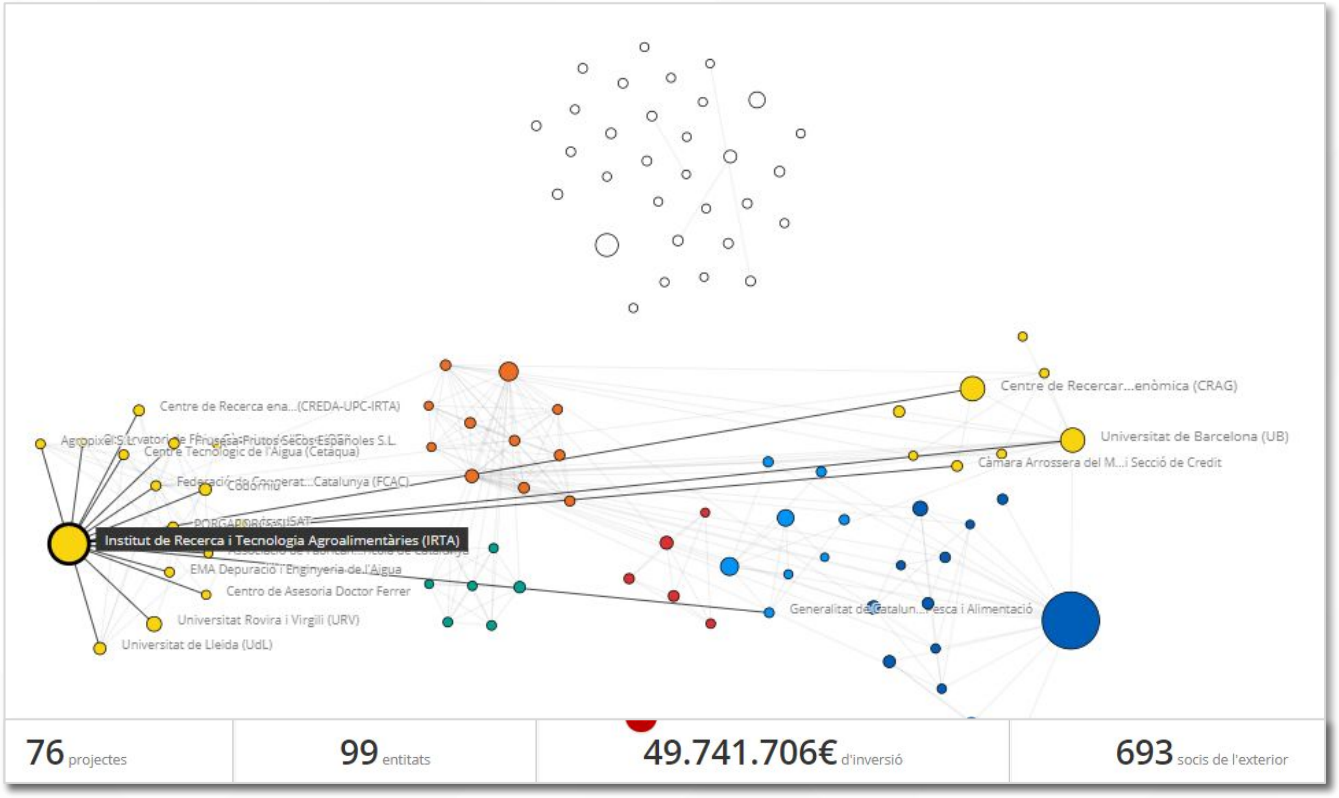
Explore the data at:
http://ris3mcat.gencat.cat/#

2 ZERO HUNGER

Display organisations by

Type of organisation

- Research center
- Company
- Others (NGOs, Foundations…)
- University
- Public administration



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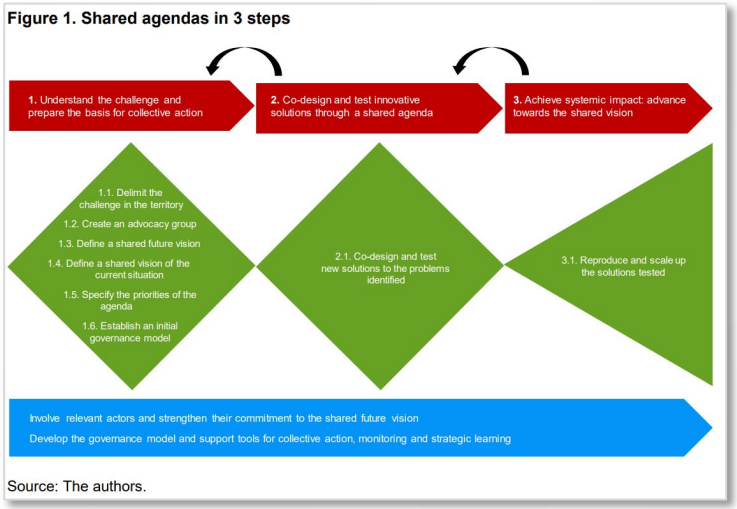
How to mobilise STI actors towards SDG-oriented innovation and collaboration



Catalan smart specialisation strategy (RIS3CAT)

Articulating shared agendas for sustainability and social change

Application in a local territory

2. Université Paris-Est Créteil (UPEC)

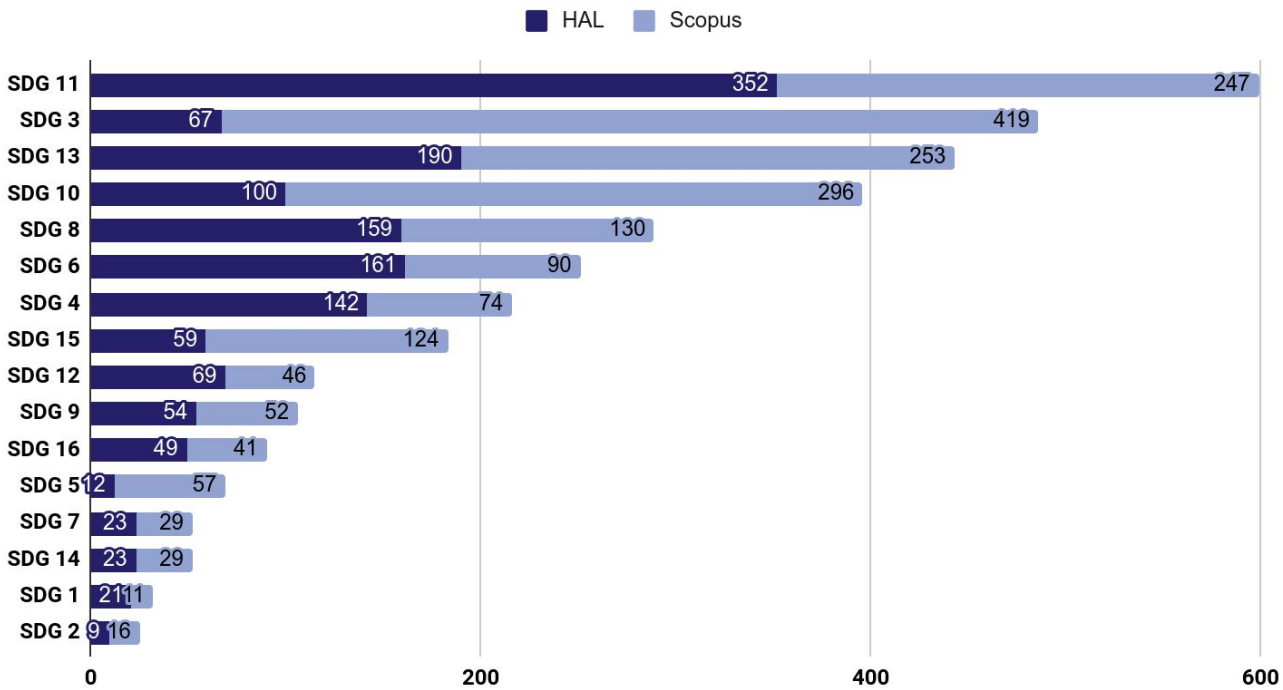
A **university**...

- **Linked with the territory - Paris *banlieue***
- **A research university but NOT a research intensive** university
- Comprehensive thematic coverage,
  with strengths in **Social Sciences & Humanities // Medicine**

UPEC has pledged to become a "**committed university**", focused on the challenges of **social transformation** and aspirations for more social justice and equity.

But, **how to set meaningful and viable priorities?**

Number of publications related to each SDG



Two complementary sources (disciplines, language)

HAL archives-ouvertes.fr

Scopus®

11 SUSTAINABLE CITIES AND COMMUNITIES

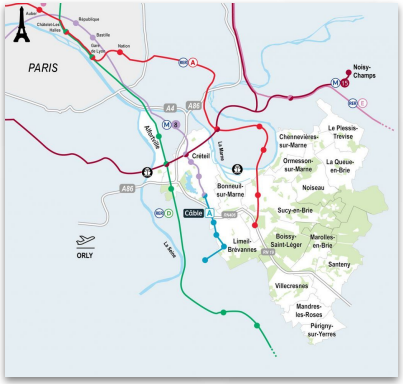
Make cities and human settlements inclusive, safe, resilient and sustainable

3 GOOD HEALTH AND WELL-BEING

Ensure healthy lives and promote well-being for all at all ages

SIRIS A·C·A·D·E·M·I·C

Grand Paris sudest avenir



[How social and environmental factors impact an urban population]

- **Long-term research and innovation project**
- **Committed to improving people's lives** through **public health**
- **Close collaboration** between regional and local authorities, local stakeholders and knowledge (STI) partners
- Applying **new ways of doing research and innovation with the territory**
  - Establishing a **living lab**
  - Promoting **citizen science**
  - Promoting **open science practices**
  - With potential implications in **education programmes and student engagement**

Key questions

A tool-kit to identify, map and characterise SDG-related texts

Still early for conclusions...

Challenges / lessons:

Localisation → adapt and extend the vocabulary, translate texts, include local data sources

Social / non-technological innovation → Requires a special focus (harder to find)

Interaction with stakeholders → use the process to build a common understanding of a topic / challenge, and to strengthen mutual knowledge

Upscaling

- **The SDG vocabulary is open**, ready to be used anywhere: A controlled vocabulary defining the semantic perimeter of Sustainable Development Goals
- **Can be used** for any institution or perimeter (municipality, region, country...)
- Useful **methodologies for priority-setting and stakeholder mobilisation** towards responsible research and innovation, smart specialisation, STI roadmaps for the SDGs, etc.

Thank you!

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