

# SELF-ASSESSMENT TOOL FOR GASEOUS INDUSTRIAL EFFLUENTS

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**WAT**  
web architecture and technologies

**ECOFYS**  
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# THE SELF-ASSESSMENT TOOL IS AN ONLINE TOOL TO ASSESS THE REGION'S INVESTMENT READINESS

- The Self-Assessment Tool (SAT) is an **online tool to assess the investment readiness your region** regarding the use of Gaseous Industrial Effluents (GIEs) as feedstock in the chemical industry.
- This online tool is publicly available for regions to provide insights in the attractiveness of recovery and utilization of GIEs.
- The SAT is also used throughout the project collect background on various regions to select the four Model Demonstrator regions.



<https://ec.europa.eu/growth/gie-self-assessment-tool/>

# THE KEY ASPECTS TO ASSESS THE REGION ARE STRUCTURED UNDER EIGHT KEY FACTORS

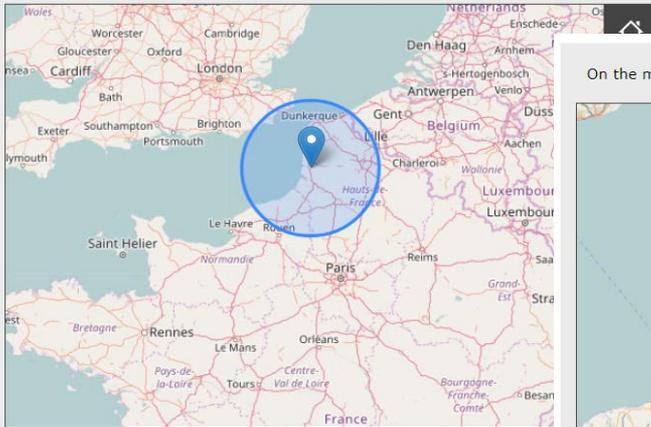
- The SAT carries out a first assessment of the region through eight key factors,
  1. **GIE availability:** Is there a sufficient availability of GIEs in the region?
  2. **GIE usage:** Is there a technical possibility of using GIEs in existing processes in the region?
  3. **Infrastructure:** Is there experience with the transport of chemical substances in the region?
  4. **Access to finance:** Would it be feasible to finance a GIE recovery and utilization project in the region?
  5. **Knowledge base:** Is there local expertise on how to deploy a GIE recovery and utilization project in the region?
  6. **Political support:** Is there political support to deploy a GIE recovery and utilization project in the region?
  7. **Thriving business community:** Is the local business community willing to cooperate to deploy a GIE recovery and utilization project?
  8. **Industrial symbiosis:** Are there opportunities to incorporate the GIE recovery and utilization in the existing business?



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# THE SELF-ASSESSMENT TOOL USES EXISTING DATABASES TO MAP THE AVAILABILITY OF GASEOUS INDUSTRIAL EFFLUENTS

On the map below define the location you want to complete the self-assessment for.



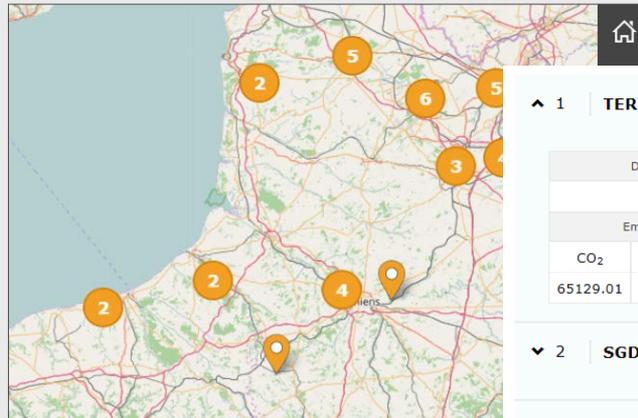
[Leaflet](#) | [OpenStreetMap contributors](#) | [Disclaimer](#)

Select the distance between the location and the sources for which you would like to see the GIE emissions.

100

Show results

On the map below define the location you want to complete the self-assessment for.



[Leaflet](#) | [OpenStreetMap contributors](#) | [Disclaimer](#)

Select the distance between the location and the sources for which you would like to see the GIE emissions.

100

Show results

## 1 TEREOS- Etablissement d'ATTIN

Distance from location [km]:				Plant name:			
14.9				0950			
Emission amounts [tonne/year]				Average emission concentrations [mg/m3]:			
CO <sub>2</sub>	CO	NO <sub>x</sub>	SO <sub>x</sub>	CO <sub>2</sub>	CO	NO <sub>x</sub>	SO <sub>x</sub>
65129.01	0	112.37	266.36	251939.1	0	434.68	1030.35

## 2 SGD S.A.

## 3 UPCL

## 4 HOLCIM (France) S.A.S - Cimenterie de Lumbres

## 5 USINE DE GUIMERVILLE



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# VARIOUS QUESTIONS ARE PRESENTED TO PROVIDE INSIGHTS IN OTHER KEY FACTORS

## Access to finance



Are there public financing entities active in your region?

- Yes, there are national and/or regional public banks in the region, with specific financing lines for investments in sustainable industry.
- Yes, there are national and/or regional public banks in the region, but with financing lines that have a broader scope than investments in sustainable industry.
- No, there are no national and/or regional public banks in our region

Are there public incentives to stimulate either business innovation and/or sustainable development in your region?

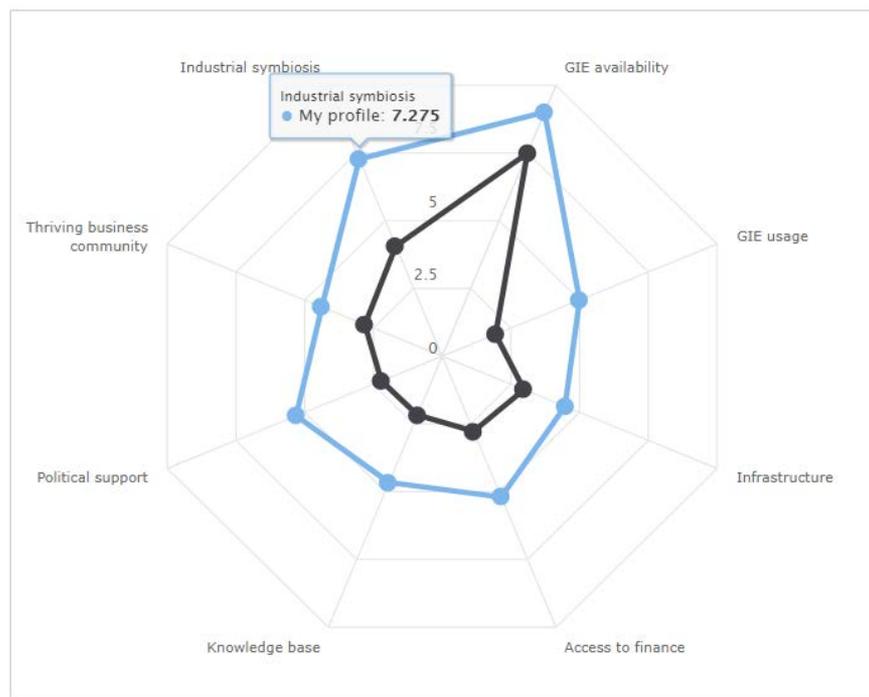
- Yes, there are national and/or regional grants, innovation tax incentives, and other measures to facilitate access to private funding.
- Yes, but not all the above.
- Yes, but hardly accessible for new business models.



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# THE REGION'S INVESTMENT READINESS LEVEL IS EVALUATED IN A SPIDER DIAGRAM AND WITH AN AUTOMATED REPORT

## Spider diagram



## Automated report

### Knowledge base

The transition to the effective use of gaseous industrial effluents (GIEs) as alternative raw materials towards a more circular economy in the chemical industry requires a rearrangement not only of value chains but also of society culture and knowledge.

Therefore, rising and spreading knowledge is a major issue that will need for innovative aptitude and attitude, skills and expertise for transition and a multidisciplinary and comprehensive education.

In addition to the in the depth and specific technical knowledge needed, the introduction of new concepts underpinning the use of alternative raw materials in the circular economy, from the general green awareness to the "system thinking" principles and developing skills for multidisciplinary teamwork, must be integrated into education curricula from vocational training to higher education.

The existence of an education and training offer in the field of sustainable chemicals, circular economy and industrial symbiosis is an evidence of the flexible adaptation to the economic trends and productive system and future skills needs.

The seemingly static training and educational system in your region will probably be an important barrier to overcome soon for the take-off and speed-up of the concepts underpinning the transition to the use of alternative raw materials.

On the other hand, to build up this flexible and adapted to the current and future trends education, it is also noteworthy in your region the fact that different stakeholders across the value chain, including industry, take part and bring together practical and different points of view in the design of curricula.

There are also other desirable supporting bodies or structures in the education field such as the so-called Centres of Excellence (CoE). These centres provide leadership, research, support and training that play a strategic role in the development of sustainable chemistry concepts.

On the other hand, to build up this flexible and adapted to the current and future trends education, it is also advisable that different stakeholders across the value chain, including industry, take part and bring together practical and different points of view in the design of curricula.

However, it is usual that many companies in the sector lack adequate information and knowledge about their own products and raw materials. The transition to more circular value chains in the chemical industry by using alternative raw materials is not possible without these foundations.



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## CONTACT

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# AT A GLANCE: ECOFYS, A NAVIGANT COMPANY



**Global** consulting company founded in 1984 with the **mission** to enable **sustainable energy for everyone** – since 2016, Ecofys has been part of **Navigant’s global Energy practice**



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