EPFL Carbon Team

SPONSORSHIP BROCHURE

2026-2027




EPFL
Carbon
Team

WHO ARE WE?

The EPFL Carbon Team brings together 40 EPFL students from all study programs, from Bachelor's to PhD level. Together, we are building:

A SYSTEM THAT CAPTURES CO_2 DIRECTLY FROM THE ATMOSPHERE.

The **EPFL Carbon Team** in numbers:

40	3	5
MEMBERS	**LABORATORIES**	**PROTOTYPES**

Cutting our emissions will not be enough: to limit global warming, we will also need to **remove some of the CO_2** already in the air. Our prototype captures it using low-cost materials and as little energy as possible, and we are studying how to **reuse or store the captured CO_2**.

We work with **three laboratories** at EPFL: LAS (Prof. Kumar Agrawal), LFIM (Prof. Wendy Queen) and LMS (Eleni Stavropoulou).

Our competition results:

- **Winners** of the OpenAir Carbon Removal Challenge 2025, out of 53 international university teams; invited to present in **New York**
- **Global Top 100** in the XPRIZE Carbon Removal, out of more than 1,300 teams from **88 countries**; the only student team at this level
- **7th** out of 42 teams at the EPFL Sustainable Innovation Challenge 2025

OUR TECHNOLOGY

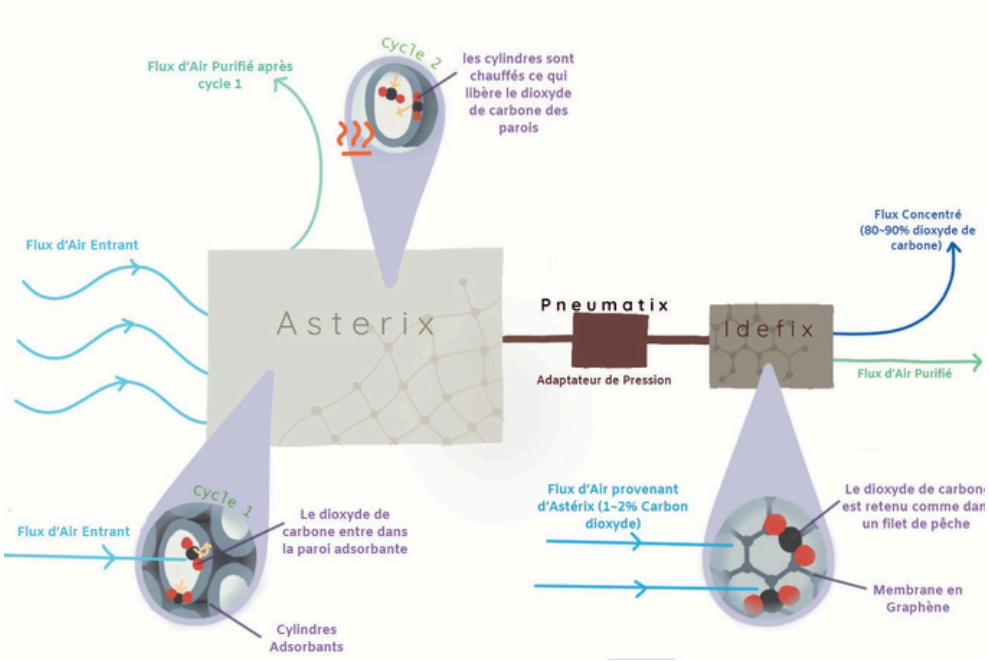
What makes our prototype **unique**:



two complementary modules, working together or separately, for near-pure CO_2

Astérix captures CO_2 using **adsorbents**, which trap it and release it when heated: the concentration rises from about **400 ppm to 1%**. Idéfix then separates the CO_2 using graphene membranes just one atom thick; this year's target: **90% purity**.

Idéfix can also be installed on its own at industrial exhaust outlets, where the CO_2 is already concentrated. Our targets for the next generation: energy from **4.9 to 2.45 kWh** per kg of CO_2; unit cost from **CHF 15,000 to 7,500**.



OUR MISSIONS

EDUCATION

An **educational program**: Didactix, to teach students the basics of prototyping.

INNOVATION

New adsorbents, tested to capture more CO_2 with less energy.

New architectures, more modular, more mobile and more efficient.

New applications, to adapt our system to different sites and CO_2 sources.

Every idea is tested on our own prototypes.

OPENNESS

A team open to all study programs, from Bachelor's to PhD, with no prior experience required: a **strong commitment to diverse profiles**.

SUSTAINABILITY

A life cycle assessment (LCA) of our prototypes, taking into account maintenance, material choices and lifespan.

WHAT'S NEXT?

OUR OBJECTIVES

In 2026-2027, we are once again aiming for the **OpenAir Carbon Removal Challenge**. To get there, each team has a specific focus:

ASTÉRIX

A new prototype

Test module from February, prototype assembled in June 2027 and connected to Idéfix in September.

PANORAMIX

New adsorbents

Selected by our chemists and tested on the Astérix module.

IDÉFIX

A silica membrane

A 10% yield target, a Raspberry Pi for the sensors and a more modular chassis.

DIDACTIX

A CO_2 detector

To warn when CO_2 levels become harmful to health.

SUSTAINABILITY

Beyond our prototypes

Study rebound effects, resource use and large-scale deployment.

HOW CAN YOU CONTRIBUTE?

Our partners' support is **essential** to moving our project forward.

Your contribution funds **our equipment**:

the new Astérix prototype, adsorbents, membranes, sensors and Didactix's CO_2 detector.

Every contribution directly strengthens our project and our team.

YOU HAVE THE POWER TO HELP US!

In return, **your name is associated with a concrete climate project, visible to the EPFL community and the international carbon capture network**.

The table on the next page sets out our benefits by level of support.

OUR SPONSORSHIP PACKAGES

Amount	Bronze < CHF 1,500	Silver < CHF 4,500	Gold < CHF 8,000	Platinum ≥ CHF 8,000
Logo on the machine	No	Small	Large	Large
Logo on the banner	Small	Medium	Large	Large
Social media	1 story	1 story + 1 shared post	2 stories + 1 dedicated post	4 stories + 2 dedicated posts
Website	Yes	Yes	Yes	Yes
Flyer	Yes	Yes	Yes	Yes

Stories on Instagram; posts on both LinkedIn and Instagram.

CONTACT

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Website
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