ÉQUIPE

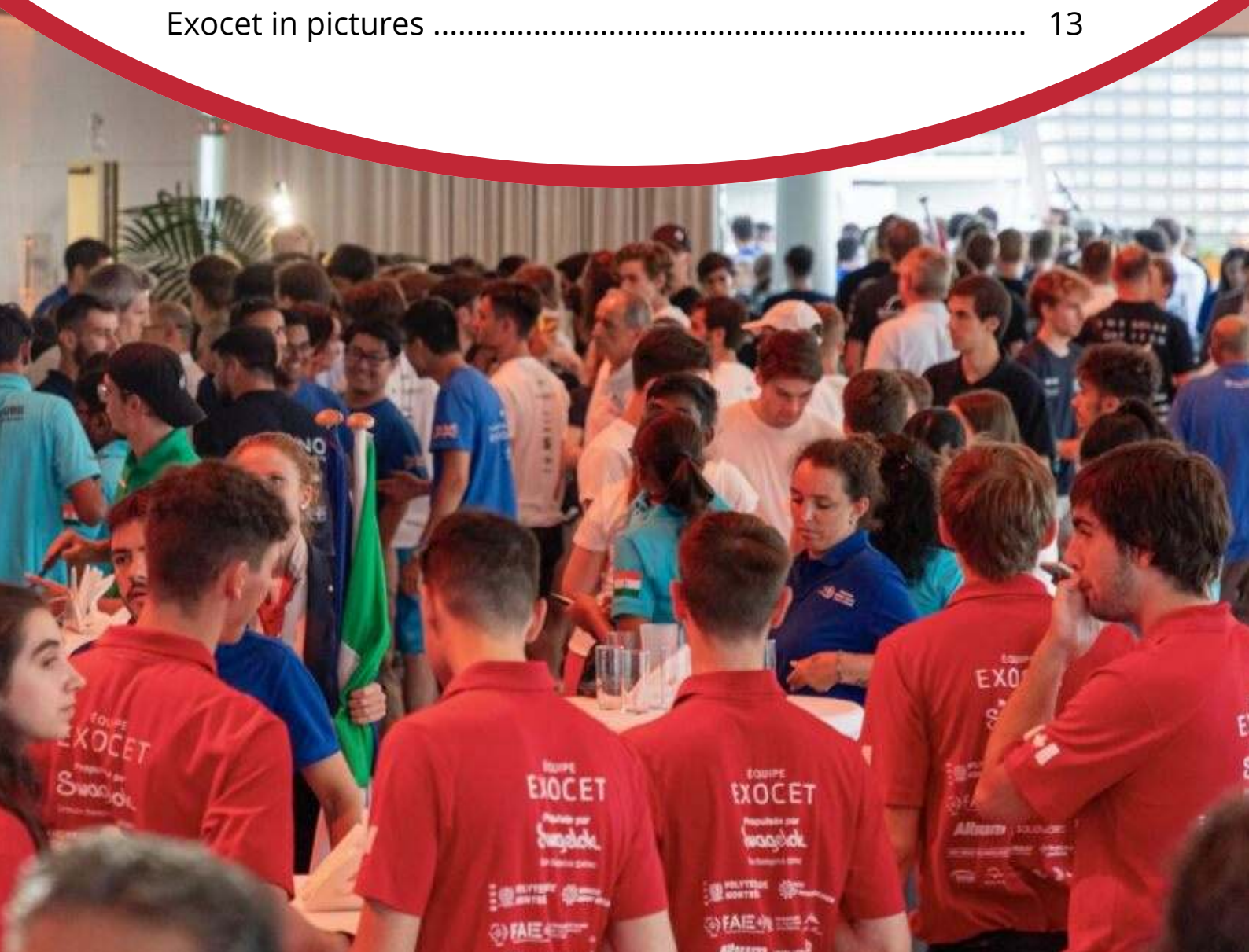
EXOCET

SPONSORSHIP DOCUMENT

2024-2025

English

TABLE OF CONTENT



ABOUT US

Founded in December 2019, Exocet is a technical organization bringing together students from Polytechnique Montréal with a shared interest in developing innovations in the maritime sector.

The team consists of approximately 30 members from various engineering fields, including mechanical, electrical, software, computer, aerospace, and physics. Although our backgrounds are diverse, we are all driven by the same spirit of innovation and a desire to learn more about the maritime industry and green technologies.

Our project involves designing and building a catamaran powered entirely by hydrogen to compete in the Monaco Energy Boat Challenge. This competition aims to promote the development of eco-friendly technologies in the maritime sector.

The team also participates in numerous community events. We take part in events such as the ADRIQ Innovation Gala, the HyPorts Conference, the EUREKA Festival, the Écosphère Fair at the Electric Vehicle Show, and much more!

OBJECTIVES AND ACCOMPLISHMENTS

Our last two participations in the Monaco Energy Boat Challenge earned us three awards. As the first team from North America to compete, we are very proud to have measured up to the high standards of this competition. However, we are aiming even higher.

Over the past two years, the team completed a full transition from fully electric propulsion to 100% hydrogen propulsion. This innovation required significant resources and specialized equipment, leaving us with limited time to optimize our systems.

For 2024-2025, we plan to optimize and redesign several of our systems to improve performance and compete at an even higher level in the summer 2026 competition.

THE MONACO ENERGY BOAT CHALLENGE

The Monaco Energy Boat Challenge regroup each year, the best of the best in student teams around the globe in order to take part in a carbon-neutral prototypes regatta.

The challenge given to the competing teams is to design and build a cockpit that will be attached to 5 metres long hulls. They also have to conceive and implement the energy and propulsion systems in order to be as powerful and enduring as possible.

Each team is also asked to present in an event called the Tech talks. These short conferences give every team the chance to present their innovations to the others as well as many participating industry professionals.

Environmental objectives

The maritime transport industry being responsible for 90% of the worldwide trading, this type of transportation plays a key role in the annual human pollution emissions. Whilst it is one of the most eco-energical means of transporting goods, it is generating each year massive amounts of air and water pollution.

The main objective of the championship is to help reducing the ecological footprint of this worldwide industry. It is why there is a price discerned to the most innovative project in regard to its environmental impact. Our team will also do a full life cycle assessment of our project. Including every aspect of our design, fabrication, usage and end of life, it will help us identify our main sources of emissions in order to be able to reduce them event further in the following year.

With the environment engraved on their hearts, Exocet has added a position for a Sustainable Development and Eco-design Analysis Manager to the team. This role will ensure that the team's decisions are aligned with our environmental objectives in addition to evaluating the environmental impact of the prototype.

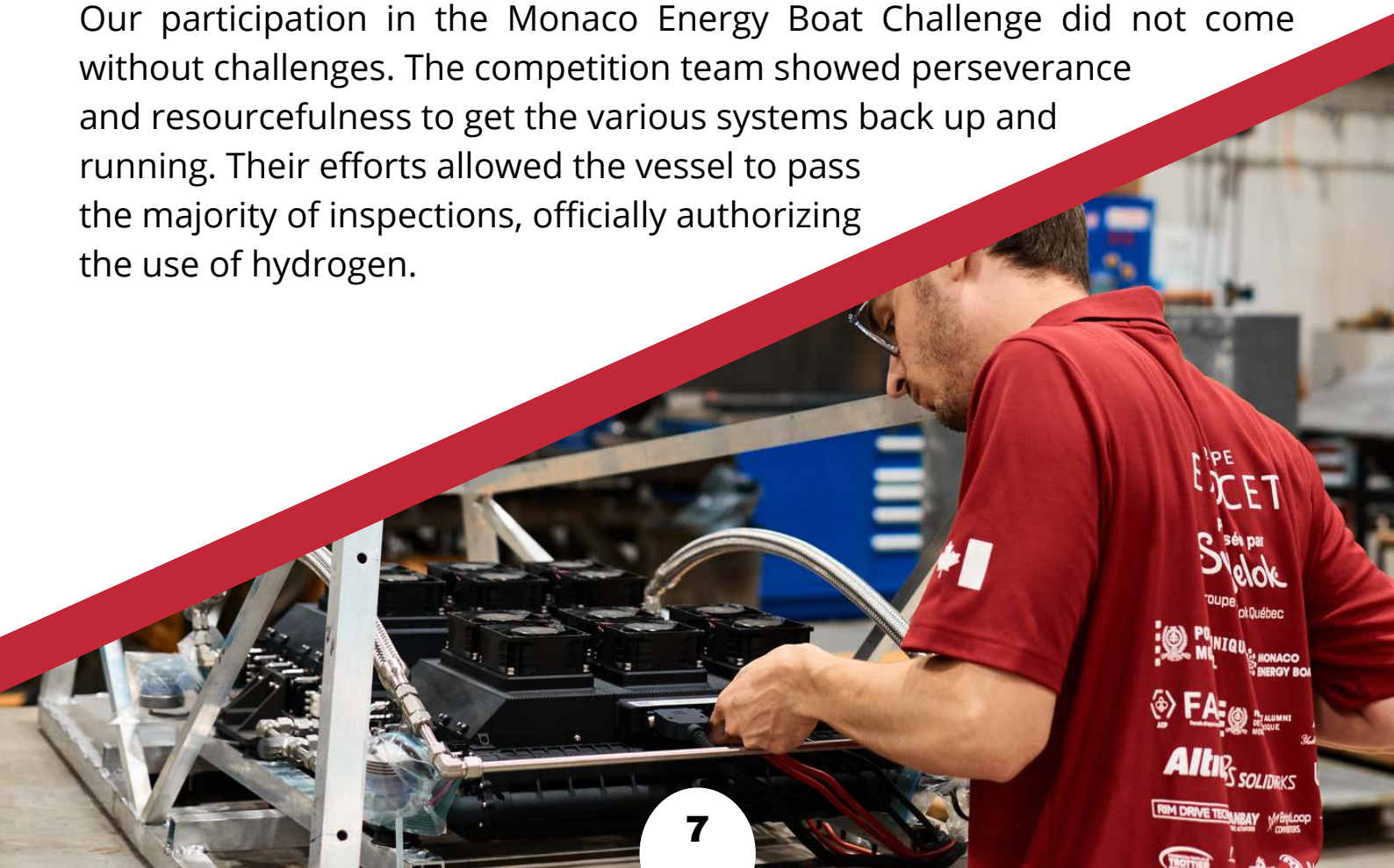
SUMMARY 2023-2024

The 2023-2024 year marked the second design phase of the second edition of our catamaran. Focused on fine-tuning the systems and finalizing our hydrogen setup, last year allowed all team members to push their limits and learn about this emerging and still largely unfamiliar technology.

On the mechanical side, the assembly of the hydrogen system was completed, and tests were carried out. In fact, pressure tests were conducted to ensure the sealing of our components. Additionally, we developed the cockpit's coating and designed other systems to facilitate handling, such as a transport cart for hydrogen bottles.

On the electrical side, the electrical system was finalized, and the onboard computer was entirely rebuilt. Custom-designed printed circuit boards (PCBs) were also developed by team members.

Our participation in the Monaco Energy Boat Challenge did not come without challenges. The competition team showed perseverance and resourcefulness to get the various systems back up and running. Their efforts allowed the vessel to pass the majority of inspections, officially authorizing the use of hydrogen.



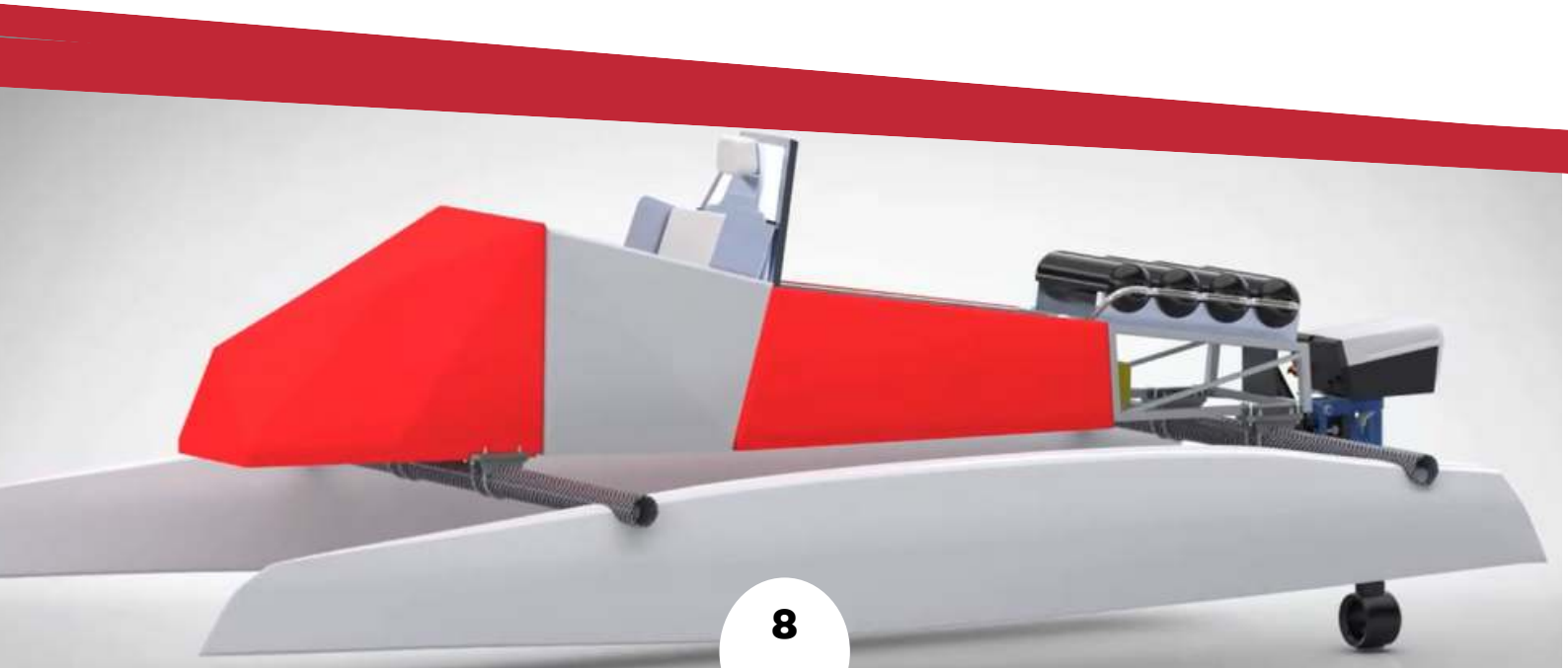
OBJECTIVES 2024-2025

To improve our performance, we have decided to take the next two years to develop our new prototype. As a result, we will not participate in the 2025 competition but will return in 2026 with a version of our prototype that will allow us to compete with the top teams.

We plan to hold an official launch of the prototype in mid-August 2025 to present it to the public and our partners, while also raising visibility for the project.

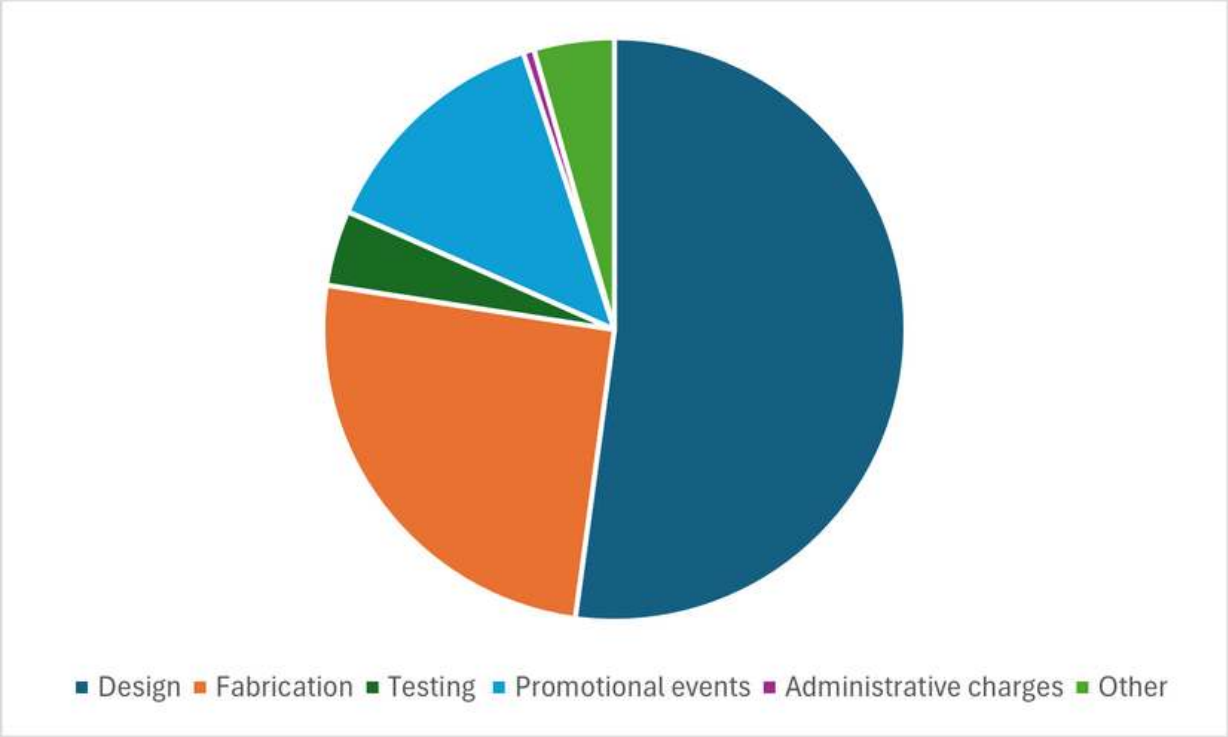
For the mechanical team, the main challenges will include designing and building a lighter, modular structure as well as fabricating the hulls. Additionally, hydrogenated nitrogen tests will ensure the system functions properly and that safety protocols are effective. Final tests with hydrogen will be conducted in a closed laboratory to verify that everything is in working order before proceeding with on-water trials.

For the electrical team, the main challenge will be redesigning the electronic system to ensure its reliability and safety. A new system will also be developed to display data to the pilot and control the boat. During testing, the team will simulate failures to assess and validate safety protocols.



Budget 2023-2024

Design	70 000
Fabrication	33 939
Testing	5 615
Promotional events	17 870
Administrative charges	810
Other	5 990
Total	**134 224 $**



WHY BECOME A PARTNER

To invest in Exocet is a great way to foster research and innovation in the sustainable development and the maritime industry. By our multiple activities as well as our participation in the *Monaco Energy Boat Challenge*, we are proud to be North American pioneers in the fields of green maritime technologies.

It is also an excellent way of recruiting young engineering talents from different backgrounds. Highly motivated and standing out by their advanced knowledge in high technologies such as hydrogen systems, our members will certainly be top tier future engineers and employees.

Our team members will also become part of great engineering companies around the world and will have great power in choosing suppliers during their careers. Helping us to know your products and services is a good way to help us being familiar with them.

Lastly, our multiple activities in the community as well as our media appearances, both local and international, will give increased visibility to your company, especially in the maritime and academic fields (see our visibility plans on page 11).

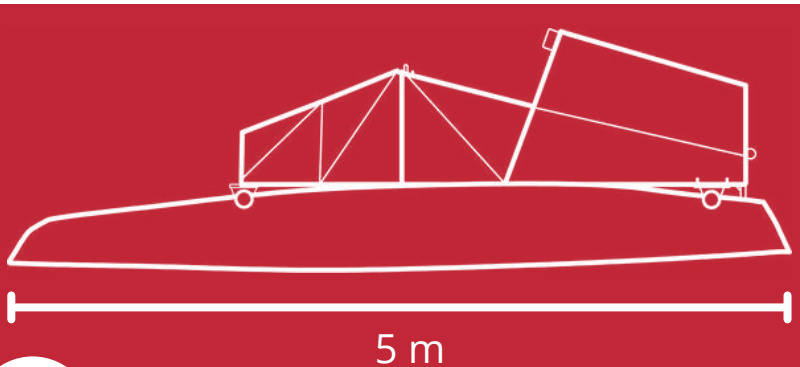
VISIBILITY PLAN

	SLOOP	CORTE	KETCH	GOÉLETTE	BRICK
Sponsorship* ($)	500 to 999	1000 to 1499	1500 to 2499	2500 +	Most generous
Public thank on social platforms	✓	✓	✓	✓	✓
Logo on our boat	Small	Medium	Medium	Large	Massive
Logo on our shirts			✓	✓	✓
Mention "team brought to you by"					✓
Access to CV database			✓	✓	✓

*The monetary value of material sponsorship will be used

Nominal dimensions of logo on the boat :

Massive
Large
Medium
Small



Contact us

Don't hesitate to contact us if you are interested in a partnership, sponsorship or if you have any questions by using the following address: exocet@polymtl.ca or by contacting a member of our team directly :

Anne Raymond
Managing Co-director
450 518-4811
anne.raymond@polymtl.ca

Émilien
Managing Co-director
438 345-5322
emilien.lemieux@polymtl.ca

Tiphaine Le Rhun
Communications director
438 488-7925
tiphaine.le-rhun@polymtl.ca

Justin Lamouche
Treasurer
514 716-3717
justin.lamouche@polymtl.ca

Follow us on social media!

@ExocetPoly

@exocet_polymtl

EXOCET IN PICTURES