



FUSTIC

FUTURE SUSTAINABLE TERRITORIES, INFRASTRUCTURES AND CITIES

Dr. Frédéric Dreyer
EPFL - ENAC

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05

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SECTION 1

INTRODUCTION

WELCOME TO FUSTIC

FUSTIC for « FUTURE Sustainable Territories, Infrastructure and Cities » aims to raise awareness and to support, educate, promote and reward research and innovation, in the areas of infrastructures, cities and territories. The goal is to have scientific, technological, educational and ethical impacts on the economy and the society both at national and international levels. Focus is set on the creation of solutions and projects linked to sustainable development and climate, in order to support the Swiss economy and territories in their challenges and good practices.

OUR CONCEPT

Fustic Association is process-oriented and works with **cross-industry organizations** to support digital technology and business models creation that will solve key economic, industrial, urban development and climate challenges **for a sustainable future**.





OUR MISSION

We want to **unlock the full potential of digital solutions**, inspire a culture of innovation and transformation, and bring viable solutions to our ecosystem & global markets, sciences and innovation at the service of Society.

Inspiring innovation and excellence are at the heart of everything FUSTIC Association does.

This embraces horizon scanning for **emerging technologies and trends**, leveraging cross-sector technology, and harnessing panels for expert advice and capability.

5 CORE VALUES

HUMAN CENTRIC

EMPOWERMENT

CULTURE

TRUST

COMMITMENT

Stakeholder management through empowerment, transversal organizational culture, trust, and commitment to excellence are FUSTIC's core corporate values.



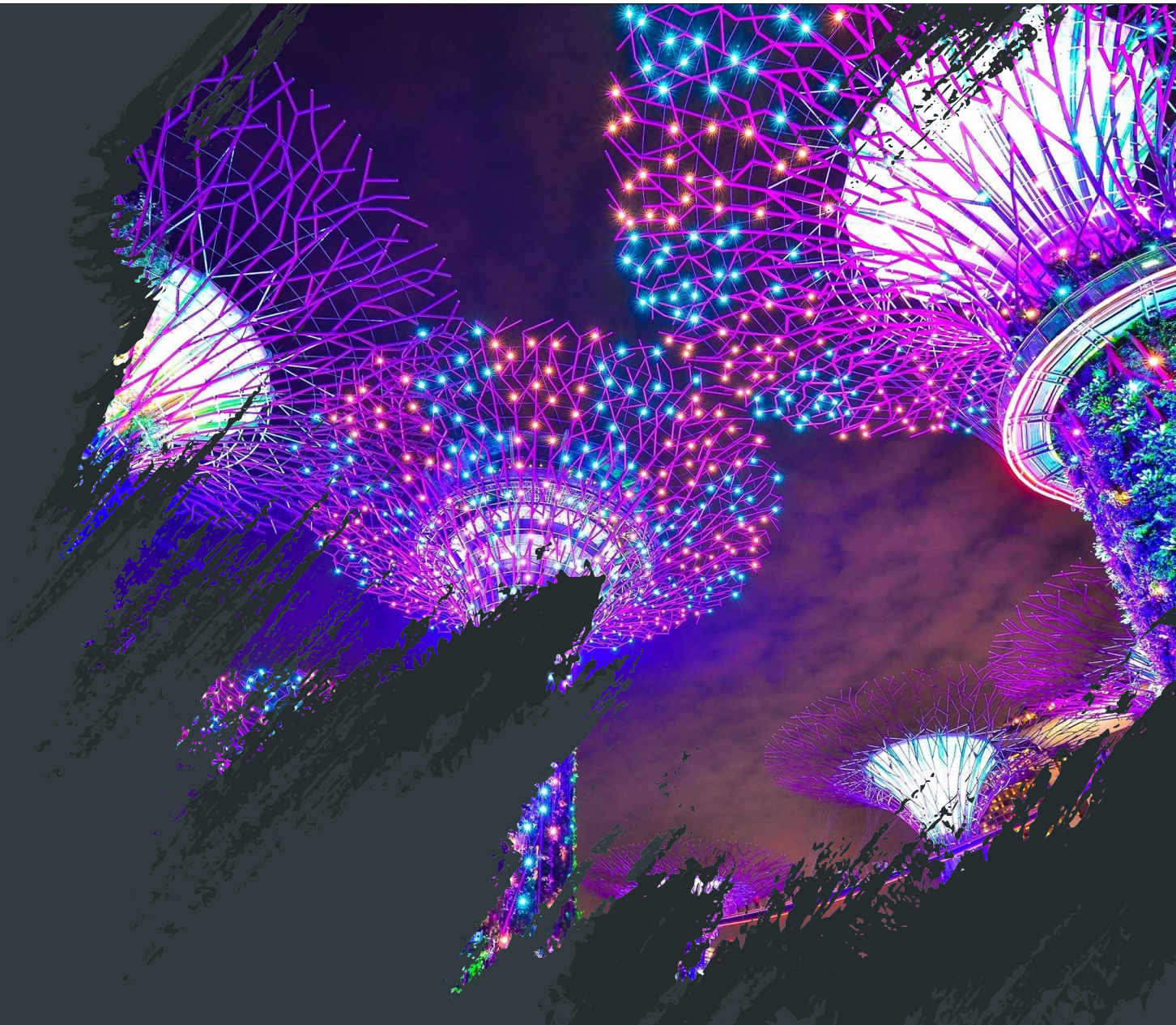
OUR PRESIDENT'S MESSAGE

PROF. CLAUDIA R. BINDER

FUSTIC association reunify and embrace challenges linked to the rapid changes to our planet's environment, driven by urban population growth, resources scarcity and climate change... with increasingly evident ramification that will unfold in the upcoming decades

SECTION 2

VISION





OUR OBJECTIVES

BRING

Cutting-edge Industry R&D and **innovations to market**

FOSTER

Market adoption (linkages research-industry)

LEVERAGE

Swiss **network of experts** in relevant areas

CO-CREATE

Solutions for **high impact**

PROVIDE

An exclusive and global ecosystem that shapes, researches, engineers, designs and brings quickly to our economy and industrial customers solutions & products by **leveraging the proven success factors**

A UNIFYING ECOSYSTEM

Between the physical and digital worlds

BRIDGE

01

02

Ideas into solutions

TRANSFORM

INSPIRE

03

04

CONNECT

A culture of innovation and transformation

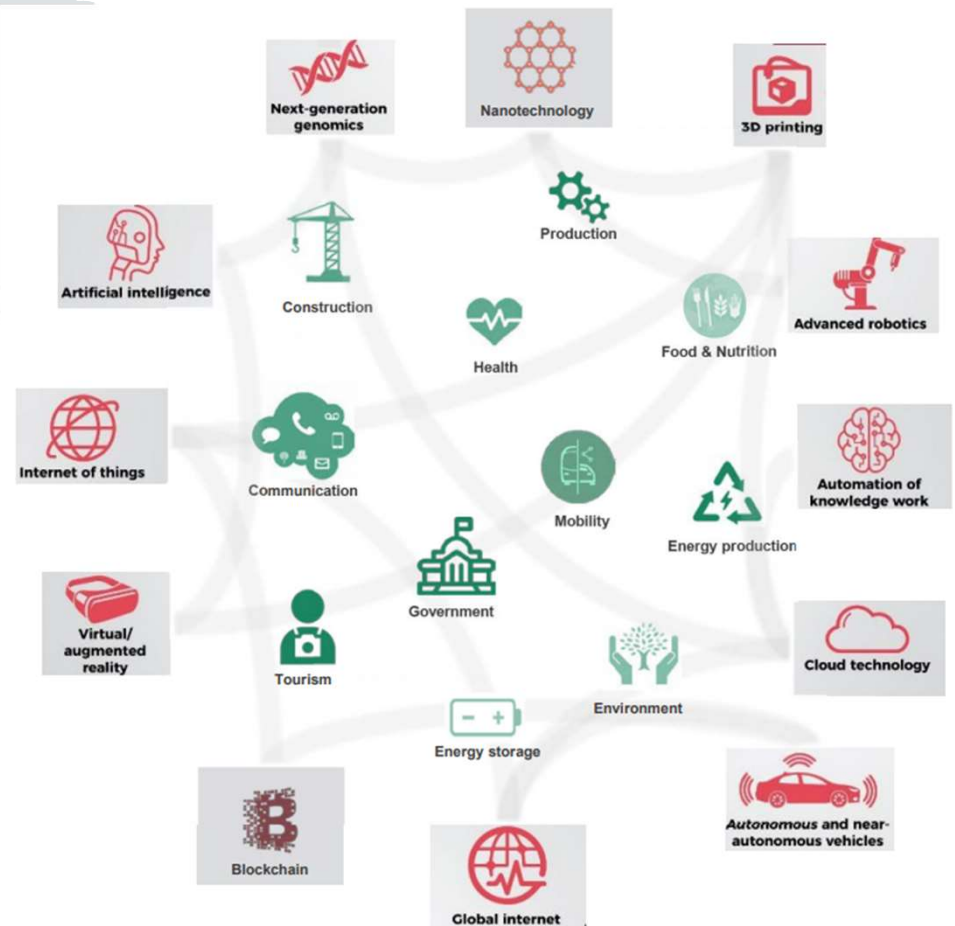
Industry, governments, regulators, and academia to drive technology investment and deployment

HOW TO UNLOCK THE POTENTIAL?

Ingredients of science-based innovation:

- Technologies, Knowledge
- Application fields, Needs
- Business models

By boosting **cooperation** in heterogeneous & **interdisciplinary** innovation teams.





SECTION 3

SUSTAINABLE DEVELOPMENT GOALS



OUR 3 AXIS APPROACH AROUND SDGS

SERVICES

03

Designing our Services to offer a unique Value Proposition to our members

TRANSVERSALITY

02

Keeping the focus on Digitalization, Sustainability & Society

TOPICS

01

From Infrastructures, to Cities and Territories, levels



AXIS 1 - TOPICS

SLL EPFL Center – ETHZ – EMPA- EAWAG

SDG 8 / 9 / 11 / 12

CIRCULAR ECONOMY

01

02

UNIL – UNIGE – SLL EPFL Center

SDG 3

URBAN HEALTH & WELL-BEING

URBAN COMMON GOVERNANCE

03

04

HES-SO Geneve - UNIGE– EAWAG – UNIL

SDG 11

MOBILITY

TRACE EPFL Center – EMPA – SUPSI

SDG 9 / 10 / 11 / 13

Each topics will be led/co-led by academics partners
Each topics is interdependent



AXIS 1 - TOPICS

HRC EPFL Center – ETHZ

SDG 10 / 15

**RURAL AND URBAN
TRANSITIONS & INTERACTIONS**

SMART CITIES

ETHZ – EMPA - EAWAG

SDG 9 / 11

05

06

Climact & Energy EPFL/UNIL Centers – FHAW

Winterthur – UNIGE

SDG 7 / 13

CLIMATE CHANGE & ENERGY

07

08

WATER & FOOD - ENERGY NEXUS

EAWAG – ETHZ – HES-SO Valais-Wallis –

SNFV - UNIL

SDG 6 / 12 / 13 / 14



Each topics will be led/co-led by academics partners
Each topics is interdependent

AXIS 2 - TRANSVERSALITY

DIGITALIZATION

- Data science / Urban planning, Data to knowledge... (SDCS EPFL Center – UNIL – UNIGE)
- Digital Twins (ETHZ – EPFL – UNIGE)
- Modeling sustainable territorial development as a system-of-systems (EPFL – UNIL – ETHZ)
- Linking multiple scales and technologies through network analysis and modeling (EPFL – UNIGE)
- Cybersecurity and Ethical data

SDG 9 / 10 / 11

SUSTAINABILITY & SOCIETY

- Resources & sharing economy (SLL center,)
- Decent quality of life & Well-being (UNIL, HRC Center)
- Sustainability Assessment (EPFL, HES-SO (Wallis))
- Urban & rural ecology and metabolism (EPFL, UNIL)
- Sociology (EPFL, UNIL, ETH, UNIGE)

SDG 3 / 6 / 7 / 12 / 13 / 15



AXIS 3 - SERVICES



FO

FBP

FP

FIB

FDS

FFY

FLA

FUSTIC OBSERVATORY

Access exclusive services such as a dedicated toolbox (radar, barometers, monitors, reports, observatories...)

FUSTIC BEST PRACTICE

Tips & tricks to inspire our members and their community to attend digitalization impact and sustainability awareness training

FUSTIC PROSPECTIVISM

Define all together : what are our desirable future? and co-create scenarios into concrete projects

FUSTIC INNOVATION BOOSTER

Initiate innovative projects (public / private / academic) to co-build best practices program

FUSTIC DATA SCIENCE

Data to Knowledge "as as Service" to help FUSTIC members to leverage the power of their data

FUSTIC 4 YOUTH

Design a dedicated program mixing education and gamification for millennials linked to digitalization, sustainability and actions for our future of cities & Territories

FUSTIC LABEL & AWARD

Deliver a Swiss Label & Award for sustainable actions in the field of Territories, and Cities for individuals & organizations.

TIMELINE & PRIORITIES

2021

FUSTIC ASSOCIATION

Creation of the Association with
the support of EPFL Presidency

P1

FUSTIC OBSERVATORY

FUSTIC BEST PRACTICE

FUSTIC PROSPECTIVISM

P2

FUSTIC INNOVATION BOOSTER

P3

2022

P4

P5

FUSTIC DATA SCIENCE

FUSTIC 4 YOUTH

FUSTIC LABEL & AWARD



SECTION 4

INNOSUISSE NTN

NATIONAL THEMATIC NETWORK

Presented by FUSTIC Association

- The “NTN – Innovation Booster” brings together interested teams from universities, businesses and society at national level around a defined innovation theme and stimulates the emergence and testing of concrete innovation ideas.
- Themes of economic relevance are to be addressed in an innovative manner: new scientific findings provide important momentum and may lead to the launch of process, products or services in the foreseeable future.
- The novel applications can impact both industry and the services sector.

NTN “CITIES & TERRITORIES LAB”

ACADEMIC PARTNERS

- University Professors
- University Researchers
- University Students

A

IMPLEMENTATION PARTNERS

- SMEs
- Start-ups
- Corporates
- Non-for-profit organizations

I

DURATION

- 4-years contract

D

F

INNOSUISSE FUNDINGS

- Up to CHF 500'000 / Y
- 50% to cover NTN activities
- 50% dedicated to initiate projects / POCs



NTN MISSION

The mission of a “NTN – Innovation Booster” is to:

- **Reunite** relevant actors around a topic of national importance
- **Stimulate** the formation of innovation teams
- **Stimulate** the development of novel, verifiable solution, product and service ideas
- **Finance** the testing and verification of promising innovation ideas
- **Assist** the innovation teams to get tailor-made follow-up support for the further development and implementation of their ideas

NTN – Innovation Booster is the primary stage of a multistage open innovation process that provides the main impulse for **launching innovation ideas and helping them to get off the ground.**

NTN PROCESS **TIMELINE**

DEC 12

OPENING OF THE CALL

All documents are made available online to submit new NTN proposals

IN BETWEEN

We need 40 to 50 non-binding letters of intent from academics and implementation partners to support the NTN Future of Cities & Territories.

To participate to the NTN it is NOT mandatory to be member of FUSTIC Association

MARCH 26

DEADLINE OF THE CALL

Submission of proposals via the predefined template

JUNE 30

SELECTION PROCEDURE

Dispatch of negative decisions or
invitations to hearings

JULY 6&7

HEARINGS

Hearings in Bern:
10' presentation and 20' Q&A

END OF JULY

FINAL DECISION

Communication of final funding
decisions
Signature of contracts and yearly
agreements
Start of NTN
With your support, we will be
among the 5 NTNs that will be
selected!

KEY TAKEAWAY

FUSTIC

FUSTIC for « FUTURE Sustainable Territories, Infrastructure and Cities » is an Association that aims **to raise awareness and to support, educate, promote and reward research and innovation**, in the areas of infrastructures, cities and territories.

ECOSYSTEM

Connecting academics, governments, corporate, public and non-for-profit **organizations to address challenges of digitalization and sustainability.**

MISSION

We want to **unlock the full potential of digital solutions**, inspire a culture of innovation and transformation, and bring viable solutions to our ecosystem & global markets.

SERVICES

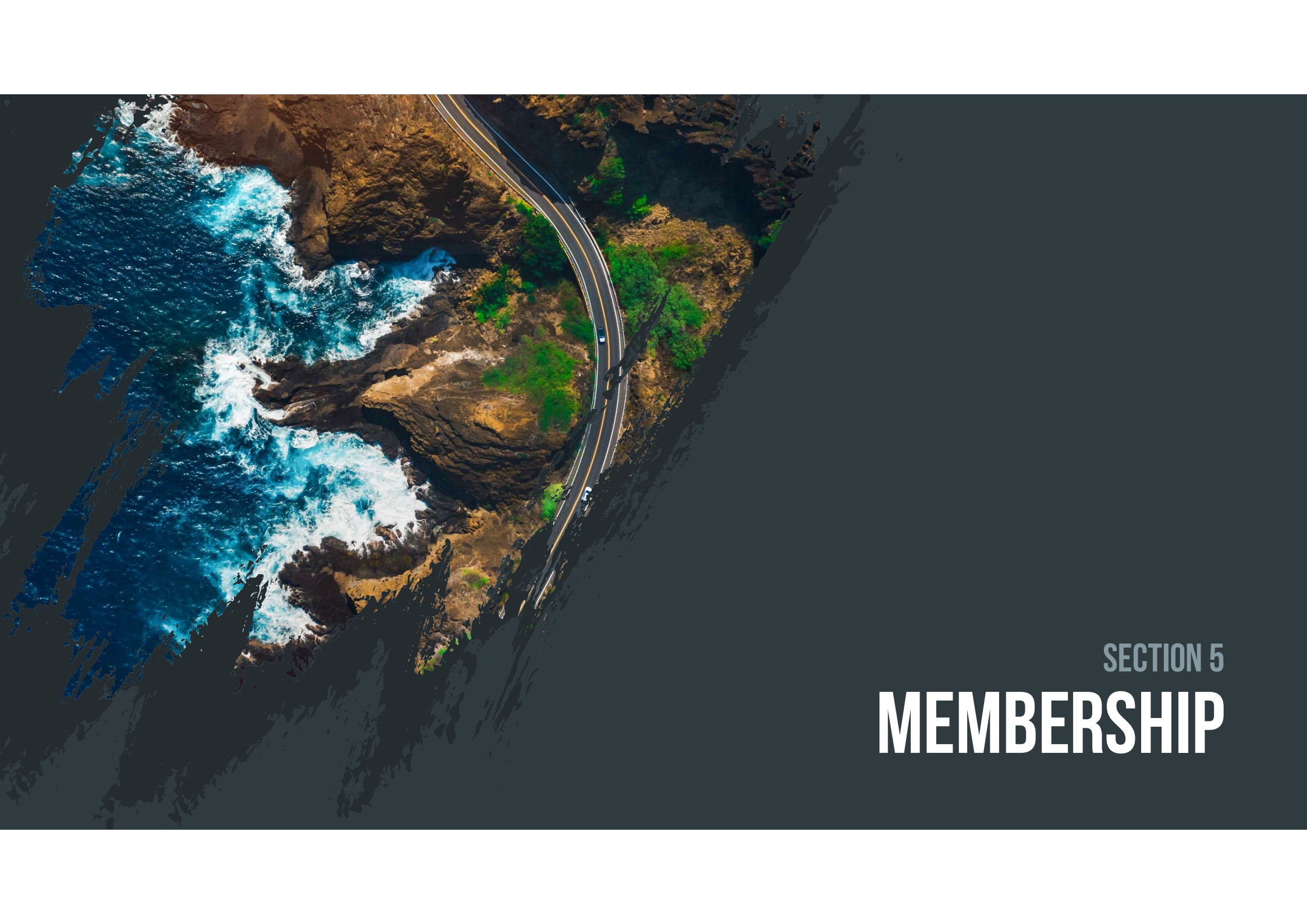
A complete **set of services to help our members join forces** and co-create innovative solutions, products and services.

OBJECTIVES

Bring innovations to market, **foster** market adoption, **leverage** Swiss network of experts, **co-create** solutions for high-impact, and **provide** an exclusive and global ecosystem.

NTN

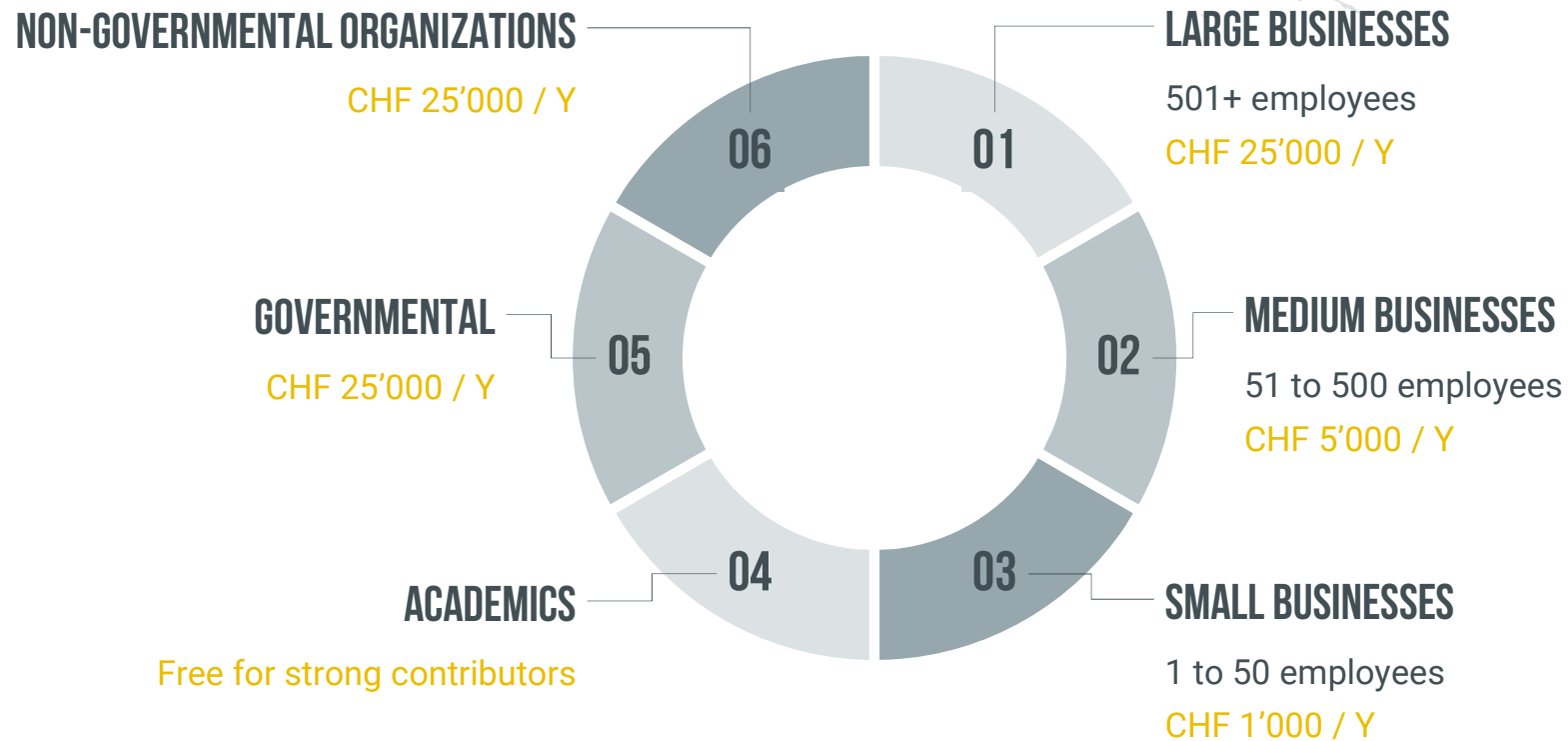
An ambition to become a National Thematic Network, powered by Innosuisse, **to accelerate cooperation and the generation of innovative projects.**



SECTION 5

MEMBERSHIP

MEMBERSHIP MODEL & FEES





OUR ORGANIZATION

01

FUSTIC ASSOCIATION

Founded and hosted at EPFL

02

ASSOCIATION COUNCIL

Academic experts / Premier / Gov / NGO
members

1 delegate per entity

04

FUSTIC COMMITTEE

President: Prof. Claudia R. Binder
Vice President: Dr. Frédéric Dreyer
Treasurer: Laurent Gaillard

03

FUSTIC MEMBERS

To be announced soon



CLOSING REMARK

DR. FRÉDÉRIC DREYER — FOUNDER — VICE-PRESIDENT

I cannot live with the idea that the status quo we're seeing can't be challenged. Our kids deserve a better future, and the future we all want starts today!



GET IN **TOUCH** WITH US!

- Phone: +41 79 819 62 50
- E-mail: frederic.dreyer@epfl.ch

THANK YOU!
ANY QUESTIONS?

FUTURE SUSTAINABLE TERRITORIES, INFRASTRUCTURES AND CITIES

Dr. Frédéric Dreyer
EPFL - ENAC