



# **SDG 17 into action** University of Geneva's partnerships for the goals

Sébastien Castelltort - vice-rector research and sustainability Fabrice Calame – sustainability advisor to the rectorate





Coimbra Group 40th Anniversary Climate Symposium Durham University 24th – 26th March 2025



FONDATION HANS WILSDORF



REPUBLIQUE ET CANTON DE GENEVE

POST TENEBRAS LUX

UNIVERSITÉ DE GENÈVE

## §1 Partnership with the industry

## The SIG chair for energy efficiency

Prof. Dr. Martin K. Patel, ISE, Institute of Environmental Science



#### The energy domain

Energy research at the University of Geneva is conducted by the following groups/clusters:

- Chair for Energy Efficiency: Prof. Martin K. Patel
- Renewable Energy Systems: Prof. Evelina Trutnevyte
- Energy Systems: Dr. Pierre Hollmuller

Across these groups, more than 30 researchers are working in the energy domain at University of Geneva. They are affiliated to the Faculty of Science, Geneva School of Economics and Management and the Institute of Environmental Sciences. The researchers in the energy domain keep close ties to other university colleagues that bring additional perspectives on energy:

- Reservoir Geology and Sedimentary Basin Analysis: Prof. Andrea Moscariello
- Crustal Deformation and Fluid Flow: Prof. Matteo Lupi
- enviroSPACE Lab: Prof. Anthony Lehmann
- Environmental Economics: Prof. Salvatore Di Falco
- Institute for Economics and Econometrics, Prof. Jérémy Luccheti
- Consumer Decision and Sustainable Behavior Lab: Prof. Tobias Brosch
- Sociology: Prof. Marlyne Sahakian



SIG is a Swiss local utility provider, and is owned by the municipalities, City and State of Geneva. It provides **water, gas, electricity and thermal energy to 240,000 clients** spread across the entire canton of Geneva. SIG has 1,750 employees, and is involved in wastewater treatment, waste recycling and the provision of services in the energy and telecommunications sectors.

#### Built environment

- Insulation
  Heating system
- Demand/Supply infrastructure
- CHP, District heating - Energy storage



- Industrial systems and materials
  - Industrial energy efficiency
    Bio-based materials



Policy and economics - Liberalization - Tariff design



# §1 Partnership with the industry

The SIG chair for energy efficiency

VIRTUE

- o 1 MCHF per year since 2013
- Factor 4 multiplier effect:
- New partnerships with the national science foundation
- New partnerships with the Swiss Foundation of Innovation
- New partnerships with the Swiss Federal Office of Energy, Swiss Federal Office of the Environment
- Comprehensive energy expertise : impact / outreach / visibility
- Education of a cohort of MSc and PhDs now working in the sector with an academic culture and expertise on climate and energy

## SCIENCE AND INDUSTRY

Trustworthy information and solutions for practitionners



#### **INNOVATION MEDAL 2023**



# §2 Partnership with foundations and the city, for primary and secondary education

Le Scienscope, porte d'entrée des sciences



réservez

Entrez ! Observez, touchez, expérimentez !



- OUTREACH
- 1'539 workshops organized for schools

**DE GENÈVE** 

26'491 school pupils in our labs and premises in 23-24 (1'616 in 2011)

fb fondation bertarelli

REPUBLIQUE ET CANTON

DE GENEVE

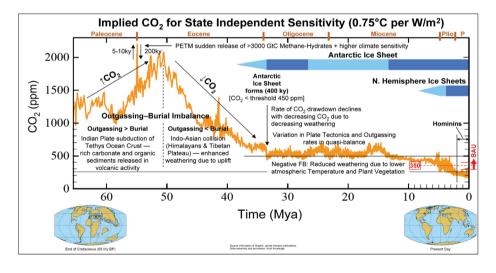
FONDATION

HANS WILSDORF

- Participation to 10 off-walls events (34 days) with >40'000 visitors
- Service to society/city
- Help teachers filling gaps in programs
- Education to research, attracting students to higher education
- Innovation medal 2024 to Scienscope and Poliscope

# §2 Partnership with foundations and the city, for primary and secondary education

- SNF-ClimatiZENs: climates of the past for citizens of the future
- Concrete narratives of climate change, "facts from the past"
- And we go out !







Pupils experimenting geologist's methods

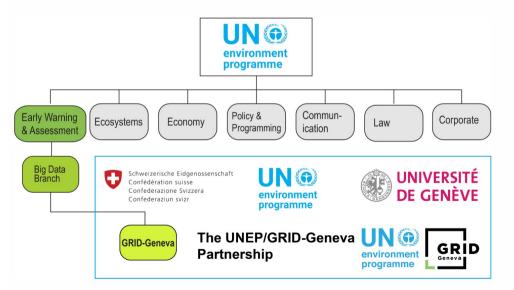
## SCIENCE AND EDUCATION PARTNERSHIP Trustworthy information for future citizens (and their parents!)



## §3 Partnership with global leaders : UNEP-GRID



The Global Resource Information Database - Geneva (GRID-Geneva), is a partnership between the United Nations Environment Programme (UNEP), the Swiss Federal Office for the Environment (FOEN) and the University of Geneva (UniGe). With a team of 20 Environment Data Scientists, GRID-Geneva's main role is to transform data into information and knowledge to support the decision making process related to environmental issues.



#### **GRID-Geneva Partnership** — Key Strengths

### • Science-to-Policy Bridge

Provides environmental data and analysis to inform decision-makers locally and globally.

### • Synergy & Capacity Building

Combines Swiss political support, UNEP's global reach, and UniGe's scientific expertise.

#### • Global Impact

Central hub in a global network delivering environmental monitoring, early-warning tools, and real-time data platforms.

## §3 Partnership with global leaders



Themes Platforms Resources Activities About Us Searc



#### Data Analytics and Early Warning for Environment

The Data Analytics and Early Warning for Environment platform provides the latest data for a selection and indicators, and gives access to specific thematic platforms: live Earth, disaster risk, ecosystems for risk reduction, environmental hotspots, planetary boundaries, loss & damage, climate change.



#### Environmental hotspots

The Environmental hotspots platform allows quick comparison of satellite images of different times and under different spectral bands, for different hotspots.

#### Switzerland runs out of snow: Shock for nation famed for skiing

Switzerland is running out of SNOW, warns a new scientific study. The country is renown for its world class ski resorts - such as St Moritz, Zermatt and Klosters - snow-covered playgrounds for the rich, the famous and the Royal Family.

## SCIENCE AND POLICY Trustworthy information for policy makers and the public

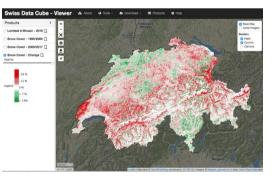
#### RESOURCE

#### "What if we run out of sand?" - ARTE

14 A

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**17** PARTNERSHIPS FOR THE GOALS



## Conclusion: benefits and lessons

#### Why we partner

- Strengthen scientific excellence and visibility in global climate research and diplomacy.
- Leverage additional funding and resources for ambitious, interdisciplinary projects.
- Enhance student engagement and employability through real-world climate challenges.
- Foster impactful science-to-policy contributions at international, national, and local levels.
- Build institutional resilience and reputation as a key player in addressing global climate challenges.

- What works for us ✓ Bottom-up approach:
- Most partnerships emerge from the initiative of our researchers and community flexibility and openness are key
- ✓ The rectorate's role:
- o Signal clearly that we encourage and support these initiatives; build institutional capacity to accompany them
- ✓ Multiform partnerships:
- No one-size-fits-all model success comes from adaptable, tailor-made collaborations (formal, contracts, conventions, informal partnership)





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# We care for our planet

GRID-Geneva is part of the Early Warning and Assessment Division of the UN Environment Programme's global group of environmental information centres, known as the Global Resource Information Database (GRID) network. GRIDs-Geneva and Nairobi were the first centres to be launched in mid-1985.

**Read More** 

environment programme



