



Science Gateway

Patrick Geeraert

+41 75 411 2348

Outline

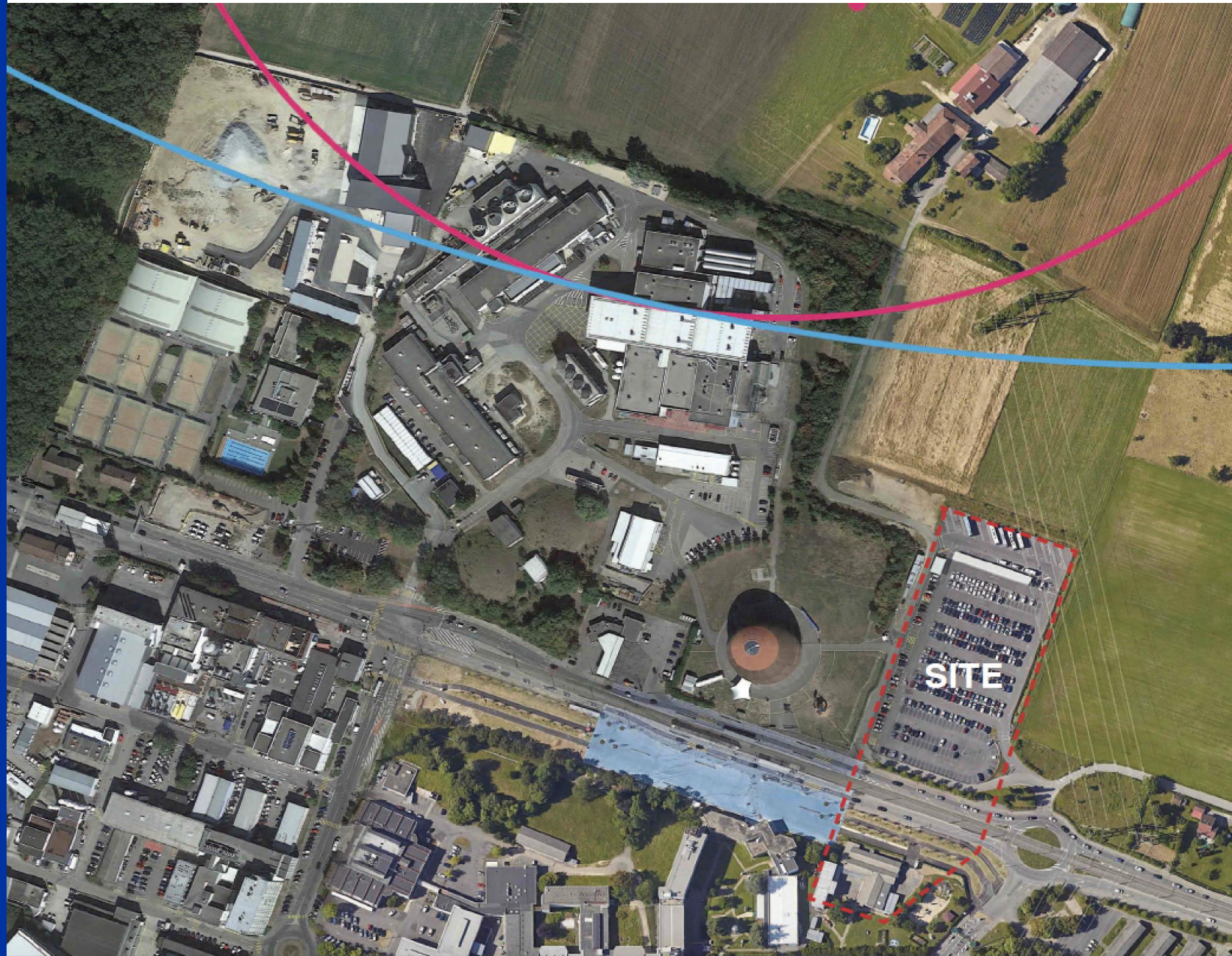
Project overview

The exhibitions

The education labs

The events

A new hub for education, training and outreach, located in the area next to the Globe of Science and Innovation, across the road from the current Reception Building. The Science Gateway will be an integral part of the CERN site and stand alongside the visit circuit to the research facilities. Activities will target the general public of all ages from 5 years up.



Target groups



Children and young adults

General public

Ages 5 to 105+

Decision makers

Goals



Inspire next generations to embark in STEM careers



Reach out to general public and contribute to a positive climate towards science and fundamental research

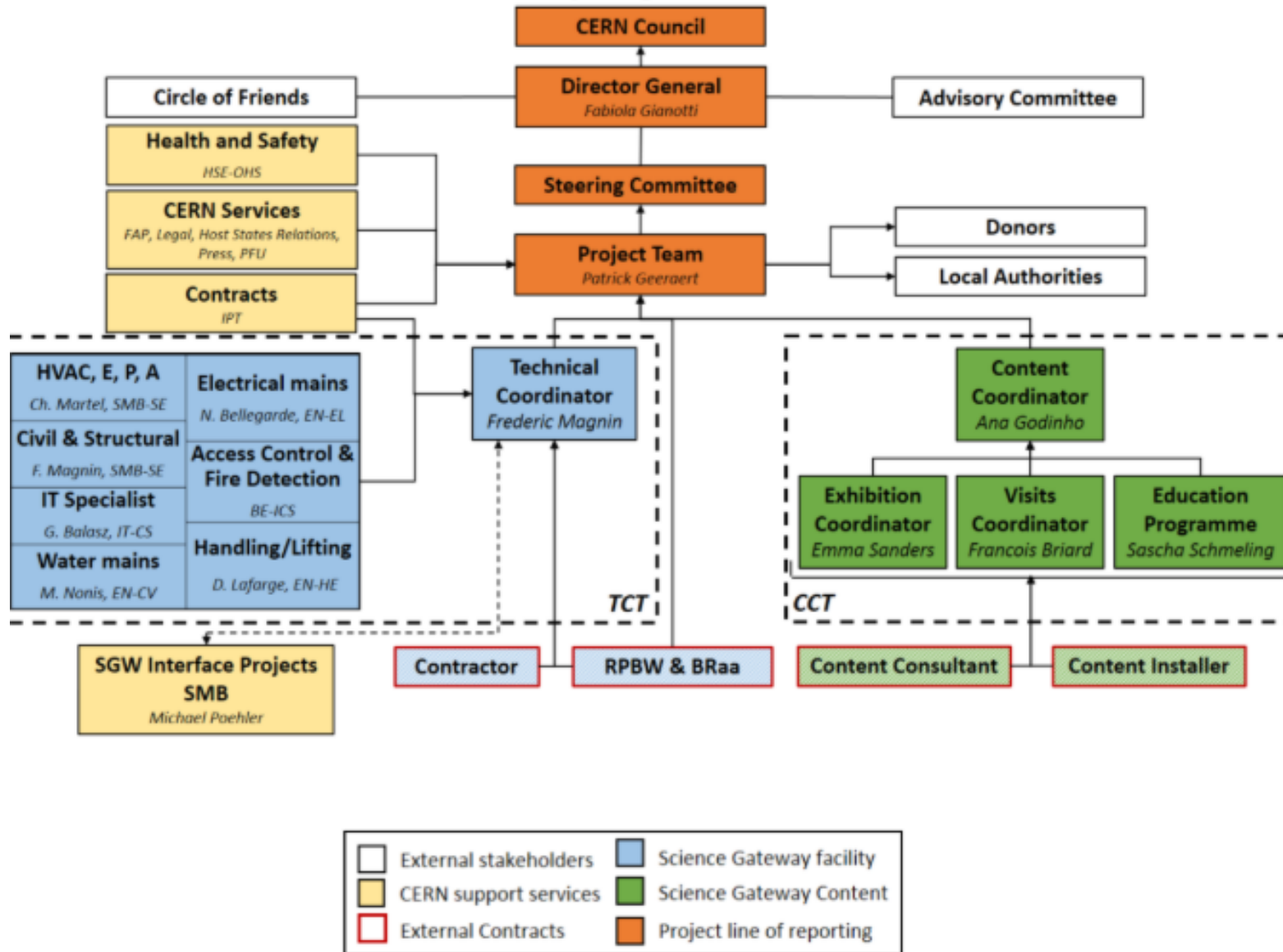


Influence decision makers



All these contribute to the long-term future of CERN

Science Gateway Organisation Structure



Speaking: Sascha Schmeling



Frederic Magnin



Pauline Emery



Alexandra Jansky



Emma Sanders



Francois Briard



Patricia Verheyden



Ana Godinho



Sascha Schmeling

Constraints / hurdles

- **Construction fully financed outside CERN budget**
- **Very large auditorium**
- **Very aggressive schedule**

- **Agricultural land**
- **High Voltage lines**
- **Go over route de Meyrin**

- **Interface projects**



Administrative procedures



Land

Globe temporary parking was on agricultural land

Concession for the bridge

right to be on public domain

Building permit

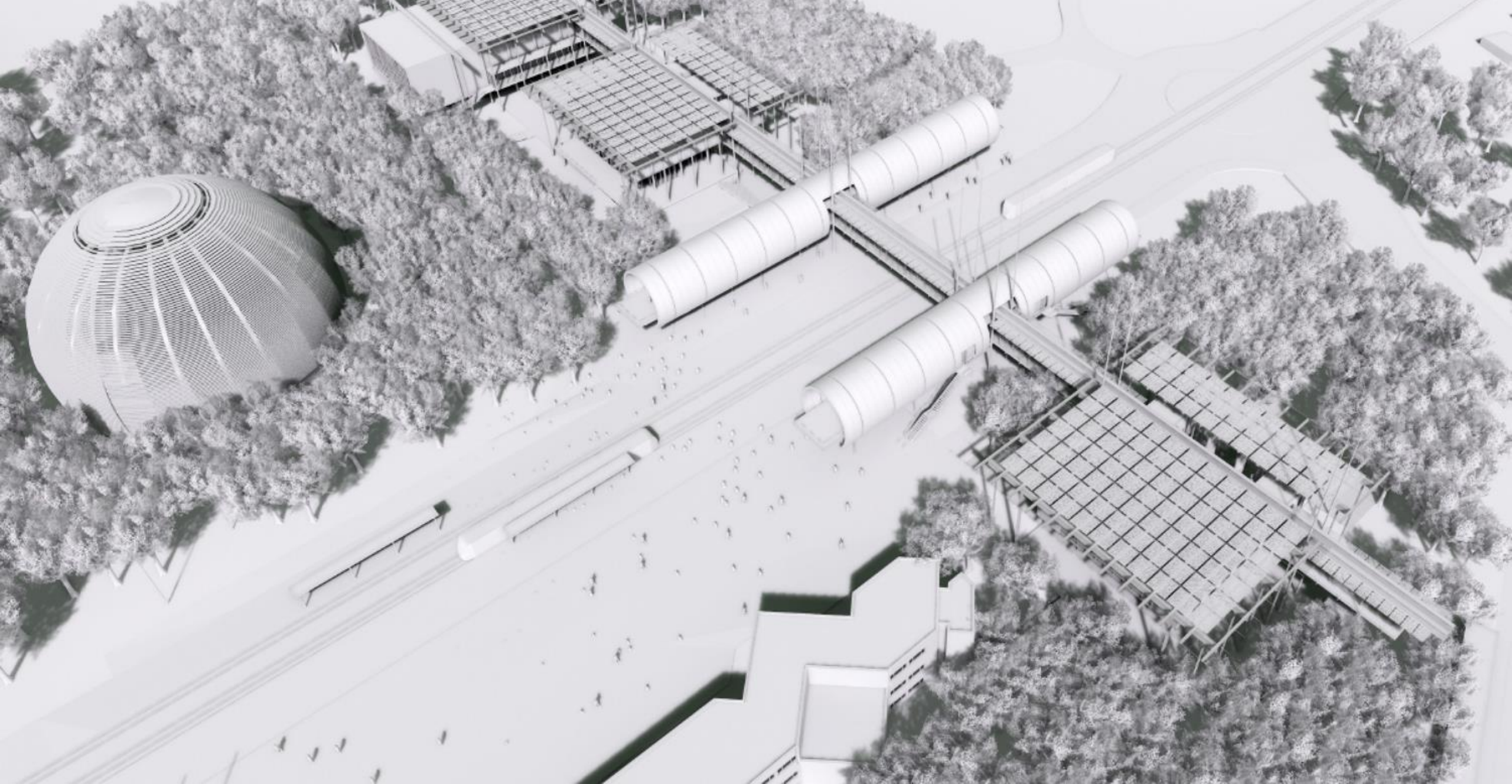


The architect(s)



Renzo Piano
Building workshop
in collaboration
with Brodbeck
Roulet architectes
associés







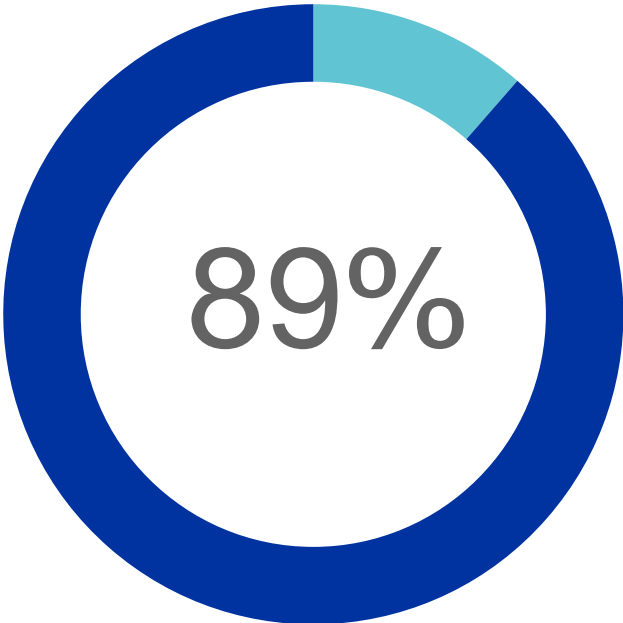




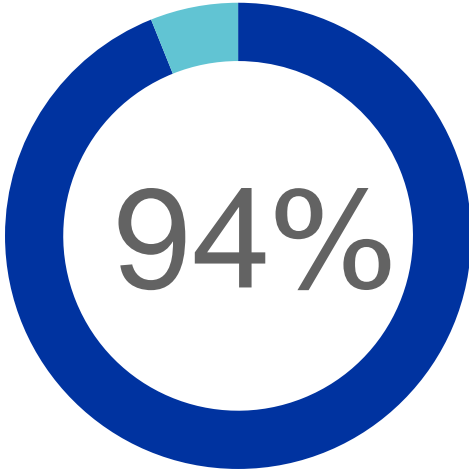


Funding percentages

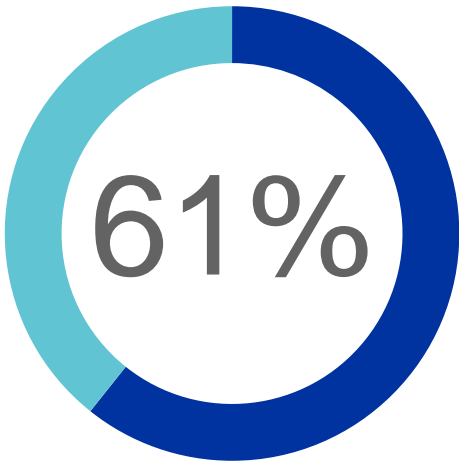
Total



Construction



Content



Secured funding

Total: 77.1 MCHF



For Construction:
68.6 MCHF
(cost estimate 73 MCHF)

For Content:
8.5 MCHF
(cost estimate 14 MCHF)



Operations

155 kCHF/y
3 years

Procurement process



Contracting Energy

1860 Solar panels and geothermal installation needed to reach *Haute Performance Energétique* requirements (building permit)

Outsourcing installation, operation, monitoring and maintenance => optimization, smooth operation, full guarantee



Geothermal probes

- Plan: 40 probes 250 m deep
- Test drilling did not reveal problems
- Explosive gas in 7/9 probes ! (CH₄)
- **GESDEC informed us that they cannot allow us to continue. 1st time in their history this happened in Geneva**



New strategy for heating/cooling

Look for a carbon neutral alternative.

Studies ongoing. Possible solution:

Air to Water Heat Pump 4-pipe system:

- Simultaneous heat and cold production possible
- Efficient heat production at low temp (-15°C)
- 2-3 units for efficient operation and redundancy
- Dim of 1 unit - 4x2.5x2.5

It will have to be installed on surface

The contract with SIG is being re-discussed



400+ Trees



Communication

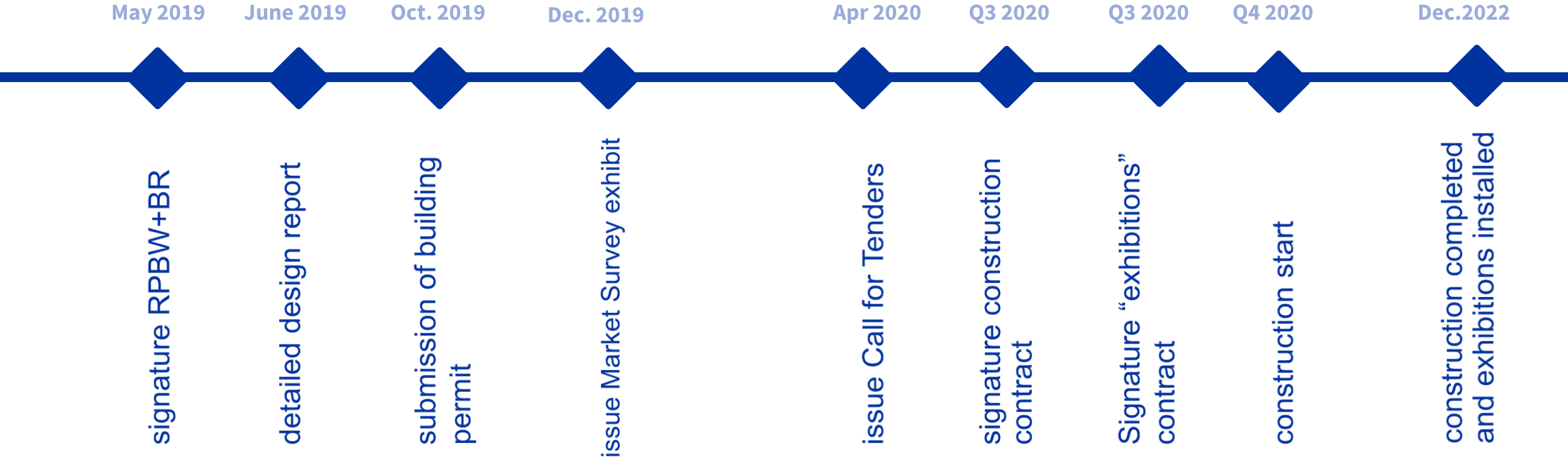
Press coverage

”1st stone” ceremony in preparation

Cedric Klapisch movie produced by ARTE



Overall schedule



As volunteer for public events

As host for science shows

As host for our lab activities

To promote our activities in your networks



**oui
nide
iou**