

## The problem

#### Over-consumption of energy in buildings

- Ineffective building insulation
- Over-sizing of heating, ventilation and cooling systems (HVAC)
- Wrong manipulation and control of these systems
- Habits of users and inhabitants

yord acts on the two last points, representing in Switzerland:







CO, emissions: ½ of the cars in use



#### Market needs



Increasing ecology awareness

Climate transition is at the heart of numerous innovation and renovation projects



Brand image of corporations

Companies communicate on reduction actions of CO<sub>2</sub> emissions



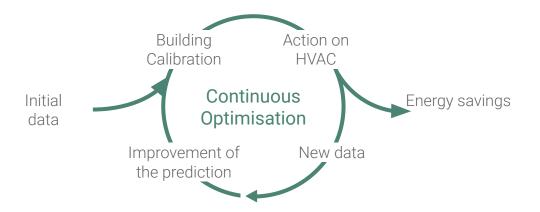
Exemplary role of institutions

Public institutions need to drive society towards climate change mitigation



### Our solution

- The innovation: Tech transfer from the chemical industry to the building domain
- Development of an algorithm integrated in a box, yox
- Automatic and fast action on new and existing HVAC systems







# Our product - yox







## Our products

#### For individual houses:

- 1 yox + sensor

  CHF 2000.- for a "classical" house
- 2 subscriptions available:
  - O technical assistance 7/7 CHF 96.-/year
  - O premium (data visualization monitor) CHF 360.-/year

#### N.B.: indicative prices only

#### For large buildings:

- 1 yox + sensors
   CHF 6500.- for 2000m<sup>2</sup>
- 1 maintenance subscription (mandatory) CHF 480.-/year
- 1 building stock monitoring subscription (optional)
   CHF 1800.-/year



#### The benefits



2 in 1

Building benchmarking & control of HVAC systems



Easy set-up

Does not require any modifications of the HVAC systems



Fast learning

The algorithm allows energy savings after one day of calibration



Data protection

Data is owned by the client and is stored on Swiss servers



Numerous functions

Optimal control, building efficiency, indoor air quality, real-time monitoring, ...



Comfort for the user

yox works in full autonomy



# Market & Target customers

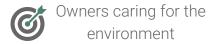






1 million houses

2'000 municipalities Cantons 60'000 SME









# CO<sub>2</sub> savings

yox allows to save between **10 and 30%** of heating energy, this represents :



1'000 kg/year

7'000 kg/year

2'500 kg/year



150m² house heating and DHW production with heating oil 2'000 m<sup>2</sup> school heating and DHW production with heating oil

1'000m<sup>2</sup> office building heated with heating oil



# Market approach



- Direct marketing
- Active solicitation
- Digital advertising
- Social media marketing



- Mouth-to-Ear
- Municipalities as product ambassador
- Network of partners/resellers



Brand image

- "Off-beat" marketing strategy
- Environment driven
- Still in development
- Currently looking for partners



## Competition

#### 3 groups of competitors

- Smart thermostats
- Building technical modifications (i.e. insulation renovation)
- Energy use optimisers

#### Our strengths



Extended functionalities



Building understanding & energy use optimisation in real-time



Energy savings just after one day



#### Team



Lucien Blanchard CTO Skills: Control Eng.

Programming



Sébastien Bron
CEO
Skills:
Marketing & Sales
Project management



Dr. Malik Kane Energy

Heating

André Buchwalder

Olivier Vorlet *Control Eng.* 

Thierry Duverger HVAC

Dr. Michal Dabros Simulation



Vincent Pilloud
CMO
Skills:
Industrial processes
R&D



CFO
Skills:
Project management
Process development

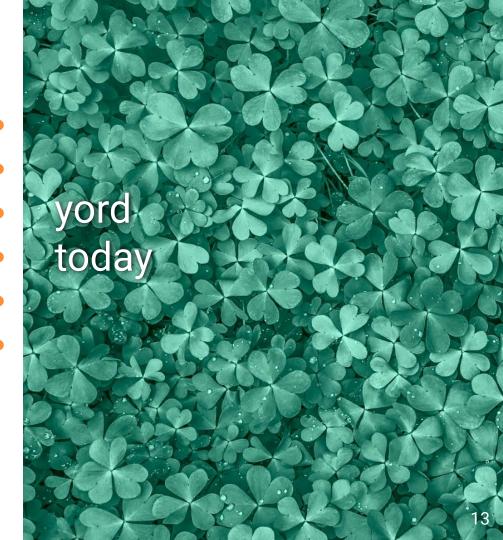
Denis Zufferey



Laurent Menoud Coach FriUp Pierre-Alain Gapany Coach Platinn

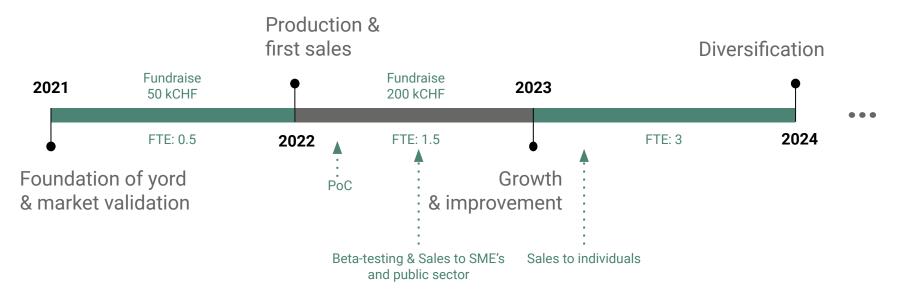


- Competition research
  - Market research •
- Technical state of the art
  - Building modelling •
- Research of scientific support •
- Key numbers validated by experts •





# yord's future

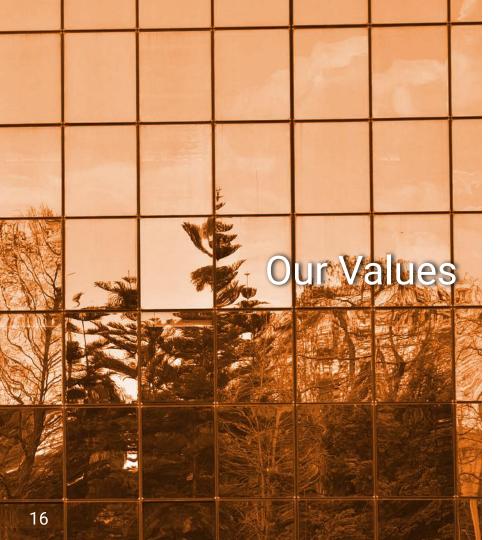




# Development plan 2021/2022







Half of the energy in Switzerland is used by buildings.

Our objective is to cut this dependence and massively reduce CO<sub>2</sub> emissions

While staying consistent and ethical

Our goal is to be leaders of the energy transition and to have a real positive impact on our society's future



n'hésitez pas à nous contacter

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