

# SMART MOUNTAINS

## CLIMATE ADAPTATION: WHAT OPPORTUNITIES FOR MOUNTAIN BUSINESSES?

### ADAPTING TOURISM MODEL OF METABIEF RESORT TO CLIMATE CHANGE

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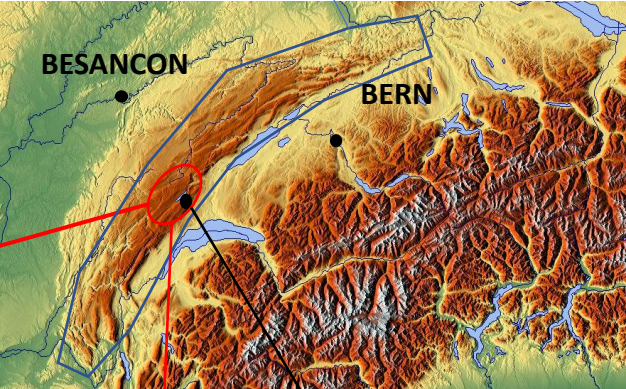


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EUROPE



JURA MOUNTAINS



METABIEF

HAUT-DOUBS AREA



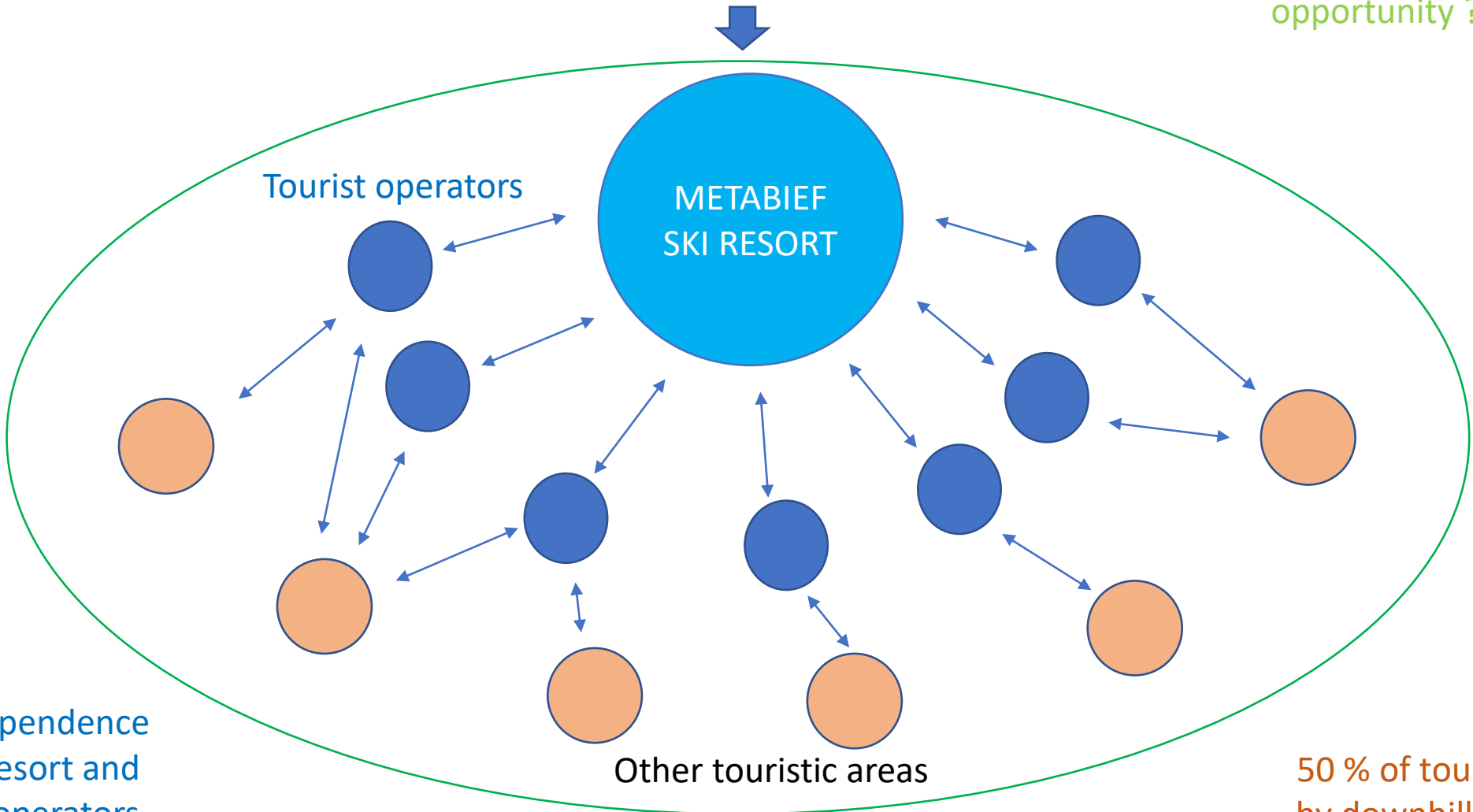
Altitude : from 900 m to 1 400 m  
40 km of ski slopes (all levels)  
Snowmaking = 40 % of ski area



Downhill Mountain Bike : 25 km of trails (all levels)  
Alpine coaster  
Mountain hiking (all levels)

# Present business tourism model of Haut-Doubs area

Climate change = THREAT on the present model → How to make it an opportunity ?

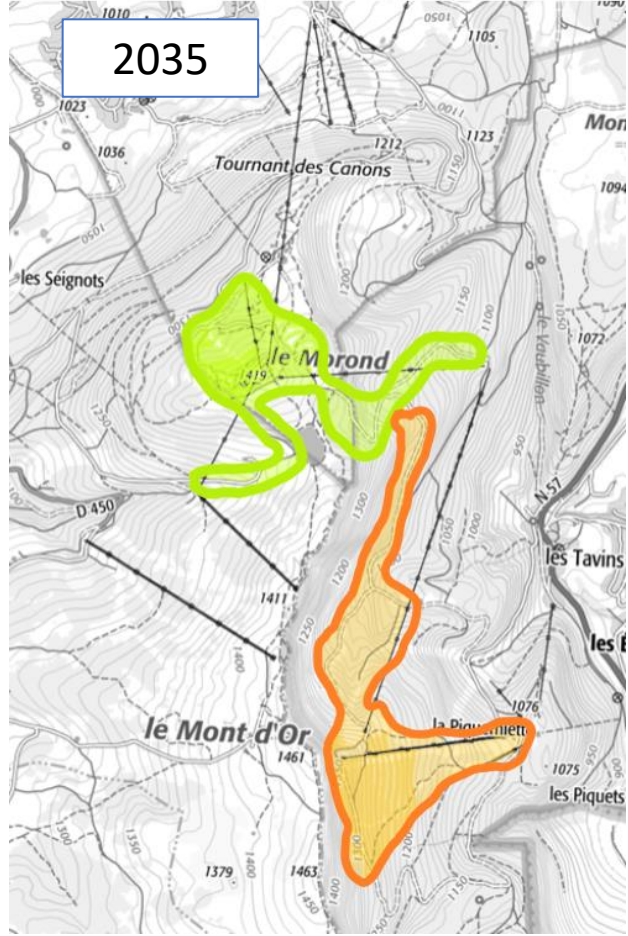
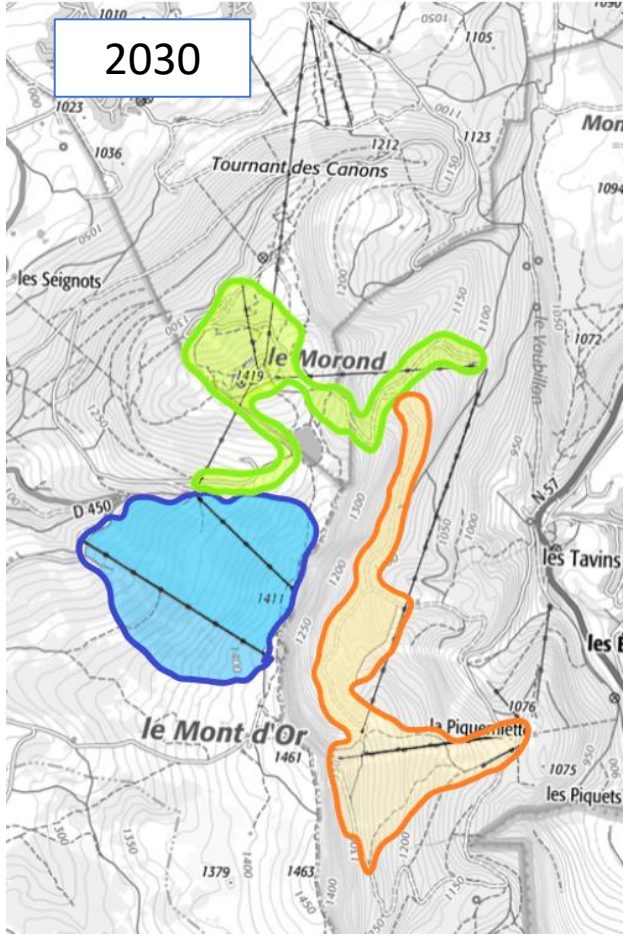
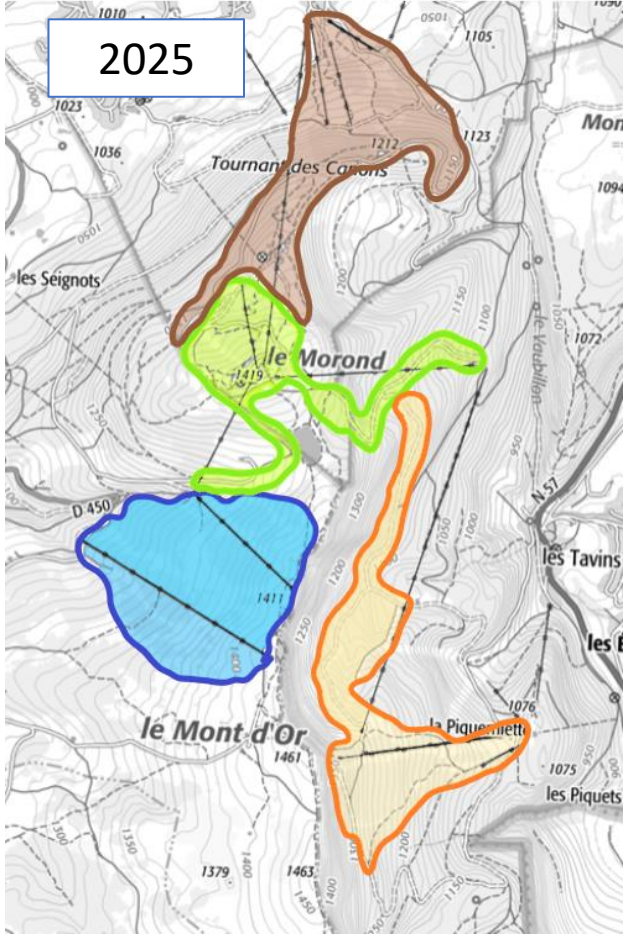
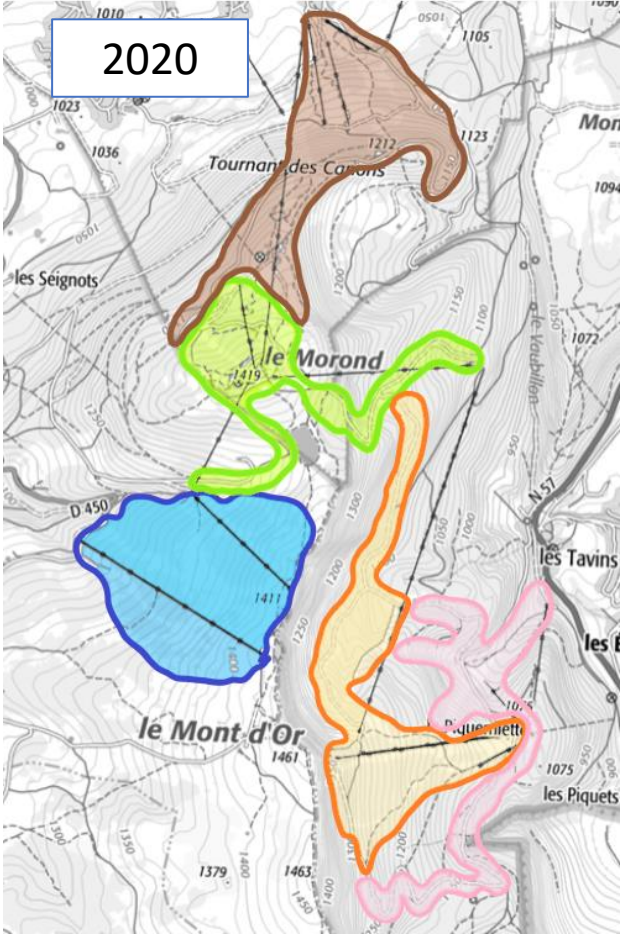


Strong interdependence between ski resort and other tourist operators

50 % of tourism revenues by downhill skiing activity

# Internal approach of climate change effects on downhill skiing

- Limit rain / snow => increase of 100 meters for 10 years (hypothesis from regional climate model)
- Time available to make snow => loss of 6 hours per year (alpine thesis and analysis of local data)



FINANCIAL BALANCE



ECONOMICALLY NON VIABLE



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# CLIMSNOW Model applied to Metabief resort

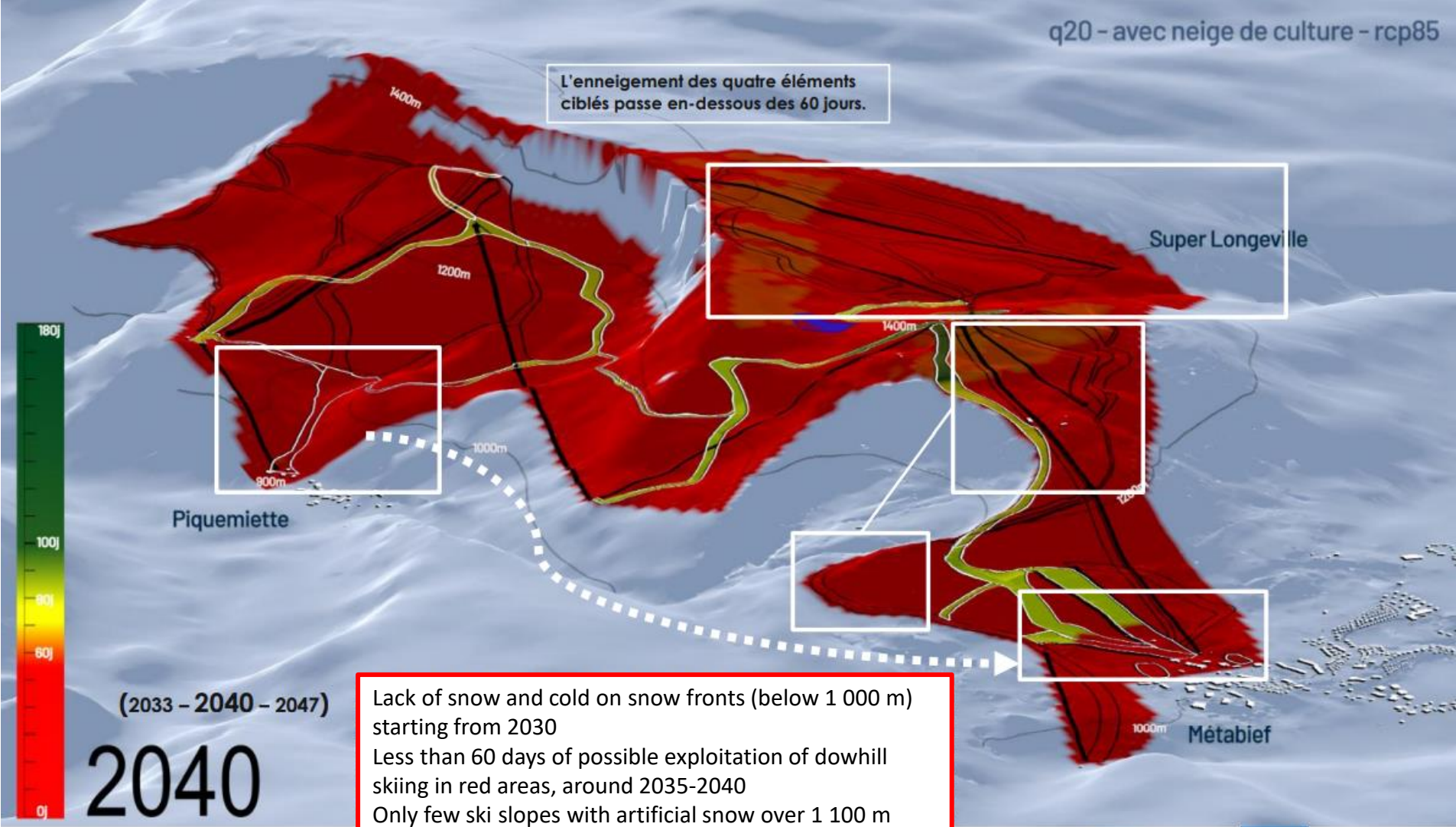
2030 : very bad conditions  
 ok ski product on snow fronts

2035 : less than 60 days of possible exploitation without snowmaking => economically non viable

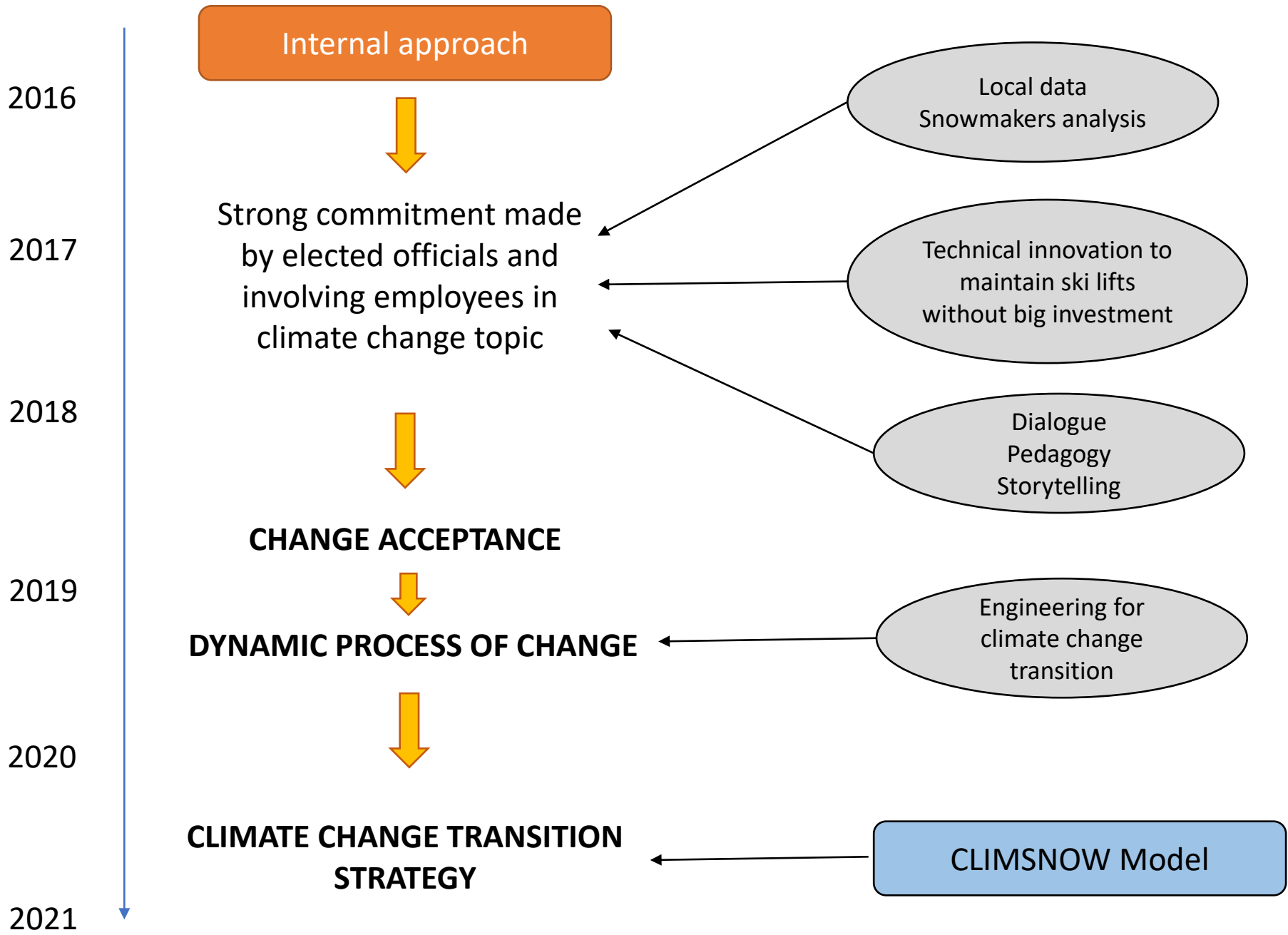
2040 : only 30 % of possible exploitation => less than 50 % of sale revenues



Great loss of tourist attractiveness starting from 2030 and critical situation in 2035



Lack of snow and cold on snow fronts (below 1 000 m) starting from 2030  
 Less than 60 days of possible exploitation of downhill skiing in red areas, around 2035-2040  
 Only few ski slopes with artificial snow over 1 100 m until 2040 = only 30 % of possible exploitation



# Climate change strategy transition for ski resort



Maintaining downhill ski with limited investments and decreasing the snow dependent debt

Today



2030- 2035



Limited development of sustainable OUTDOOR activities on the mountain massif in order to increase the environmental wealth of the area and preserve pastoralism and forestry

Risk = loss of 50 % of the tourism revenues  
 ↓  
 End of tourism or opportunity to build a new Model ?

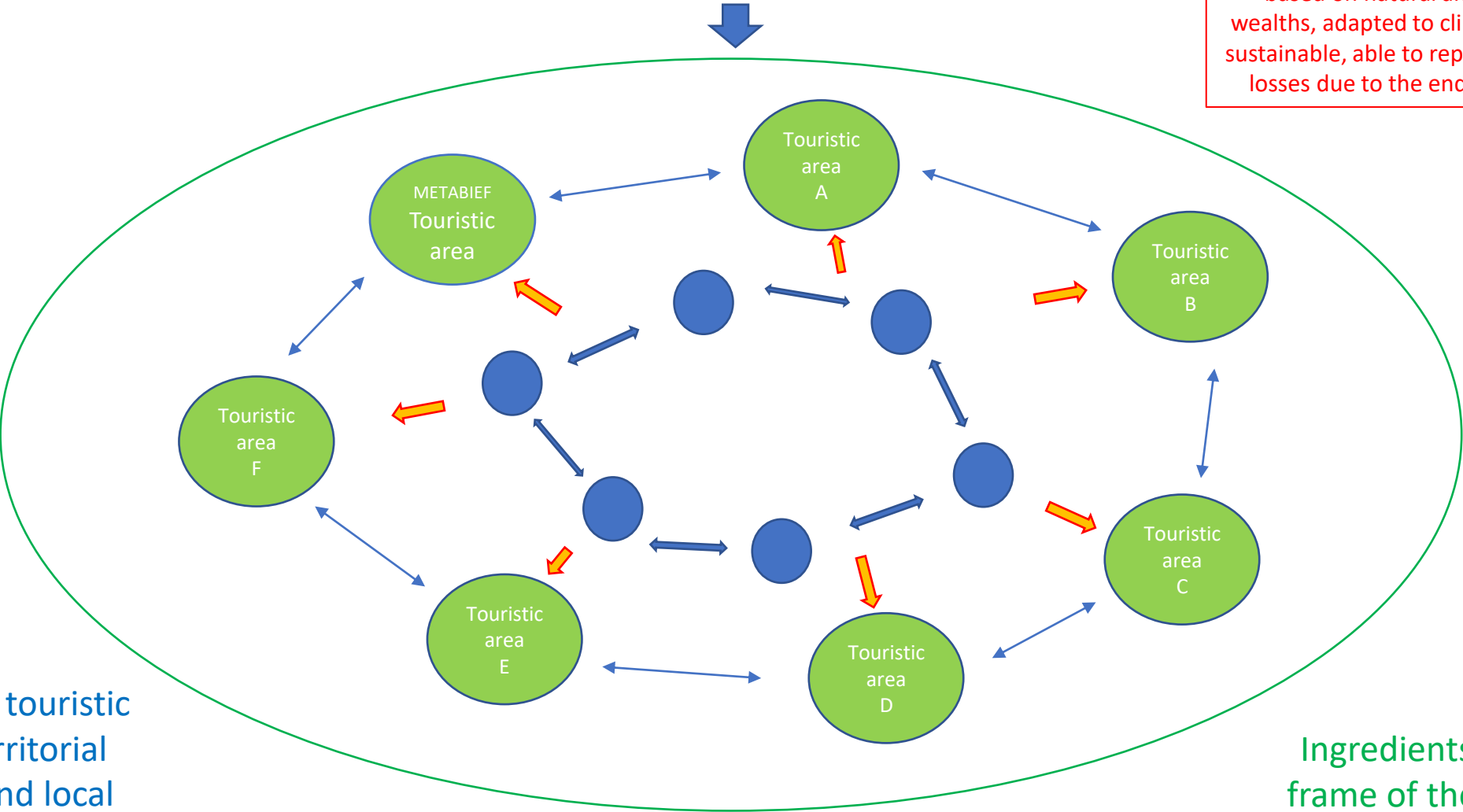




# New business tourism model for Haut-Doubs area

Climate change = OPPORTUNITY to build a new model

Goal = to reach new community activities based on natural and patrimonial wealths, adapted to climate change and sustainable, able to replace the revenues losses due to the end of downhill ski



System's core = touristic operators , territorial collectivities and local inhabitants

Ingredients = values and frame of the new model + cooperation



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# Values and frame for a new tourism model on Haut-Doubs area

Creation of a brand to mark the turning point in tourism strategy



by Montagnes du Jura

Frame for the action



## Branding with sustainable values

### SUSTAINABLE TOURISM

Developing tourist products that are accessible to the general public, accepted by local inhabitants and adapted to climate change



### HUMANISM

Human as the system's core to promote human values : health, well-being, social inclusion and cohesion, personal development



### CIRCULAR ECONOMY

Developing local products between local operators, creating local marketing networks and enhancing professional skills



### INNOVATION

Developing the sense of change and skills to boost the spirit of creativity, in order to be flexible and agile



### ENVIRONMENT

Putting biodiversity at the centre of activities and professional skills, empower people, making environment loved by people in order to protect it



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# Cooperation for a new tourism model on Haut-Doubs area

Levy on ski pass from METABIEF ski resort

Finance

Engineering for climate change transition

Change management

Project management for ski resort transition

Territorial collectivities

Tourist operators

Product

INVESTMENT  
COSTUMER SERVICES

TOURISM OFFICE  
Haut-Doubs  
by Montagnes du Jura

LAB'O

THINK TANK FOR A SMART MOUNTAIN  
Innovation / Collective intelligence

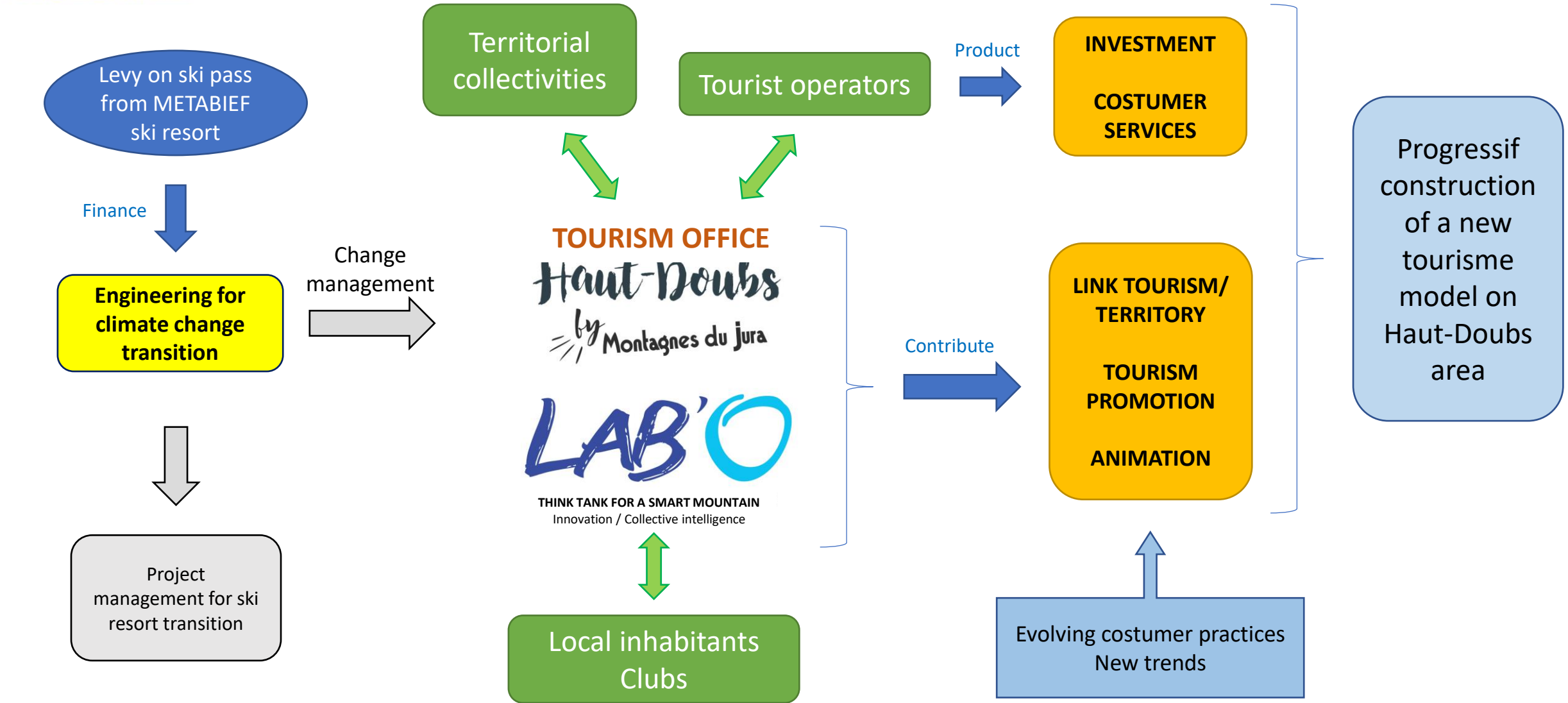
Contribute

LINK TOURISM/  
TERRITORY  
TOURISM PROMOTION  
ANIMATION

Local inhabitants  
Clubs

Evolving costumer practices  
New trends

Progressif construction of a new tourism model on Haut-Doubs area





## First ACHIEVEMENTS



e-bike network with digital tools for touristic discovery

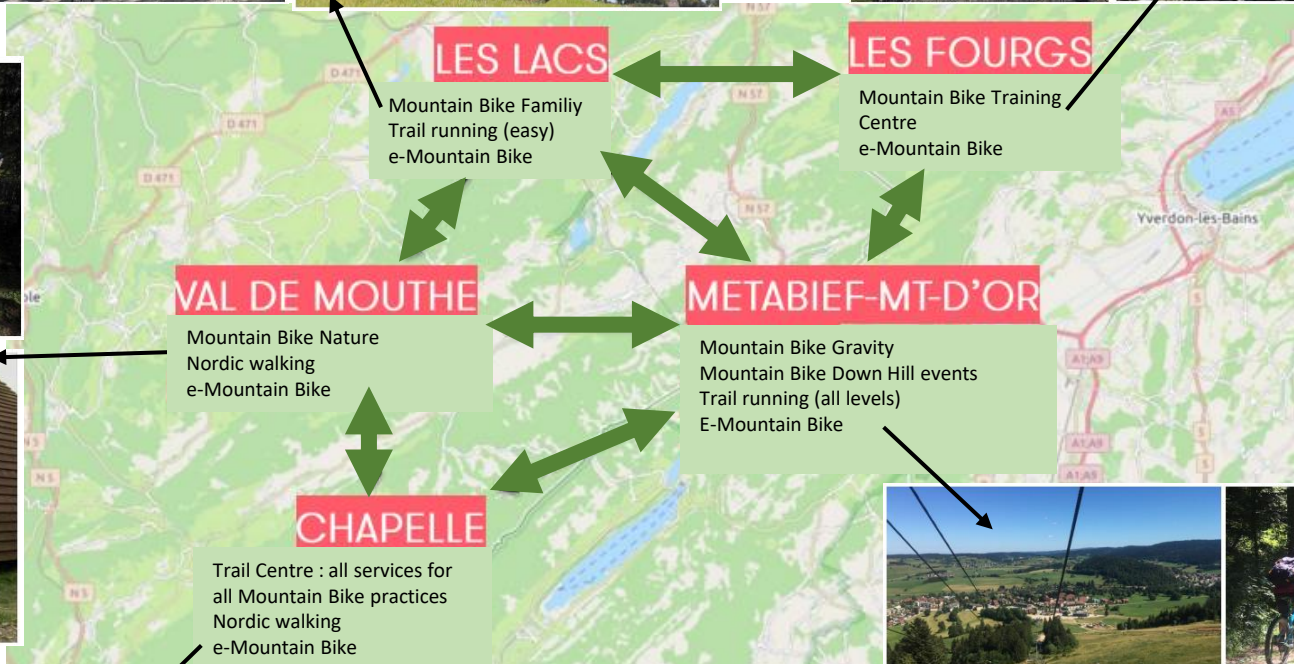


Ultra Trail on Jura Mountain



Federation of OUTDOOR clubs

# Mountain Bike / Trail running / Nordic walking Project



# Ongoing studies and experimental project



OUTDOOR for disabled persons



MASTERPLAN for investments adapted to climate change

Scénario 2  
Ré « habiter » la montagne

## SUSTAINABLE OUTDOOR



Quiétude attitude

Les bons réflexes nature




RANDONNÉE



VTT

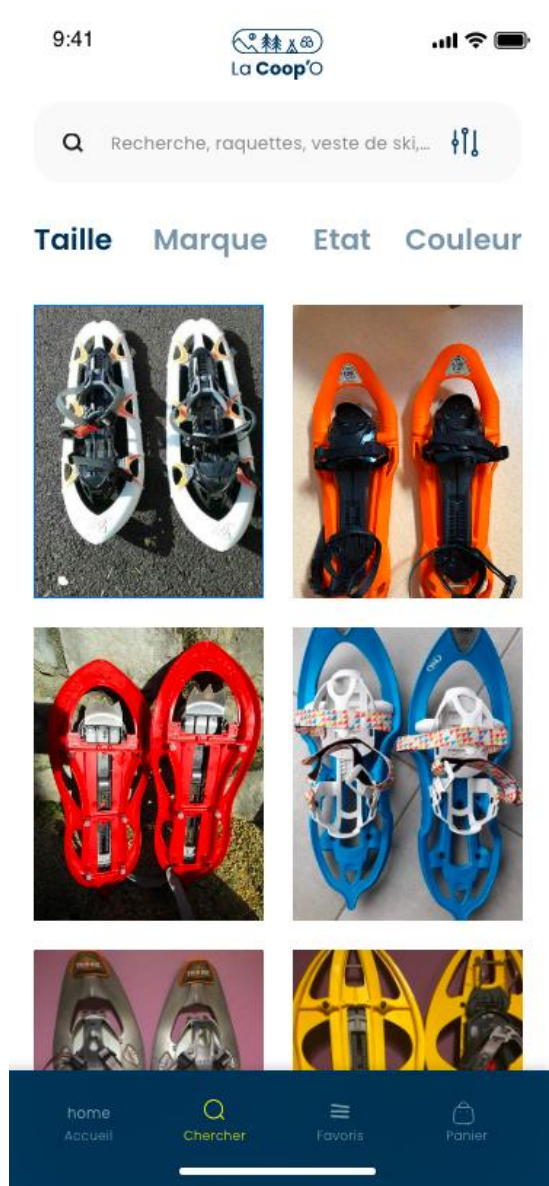


ESCALADE & ALPINISME



TRAIL

# First ideas from THINK TANK from design fiction work sessions



Federation of tourist operators for buying, lending, repairing and reselling OUTDOOR tools

# First ideas from THINK TANK from design fiction work sessions



New touristic activities





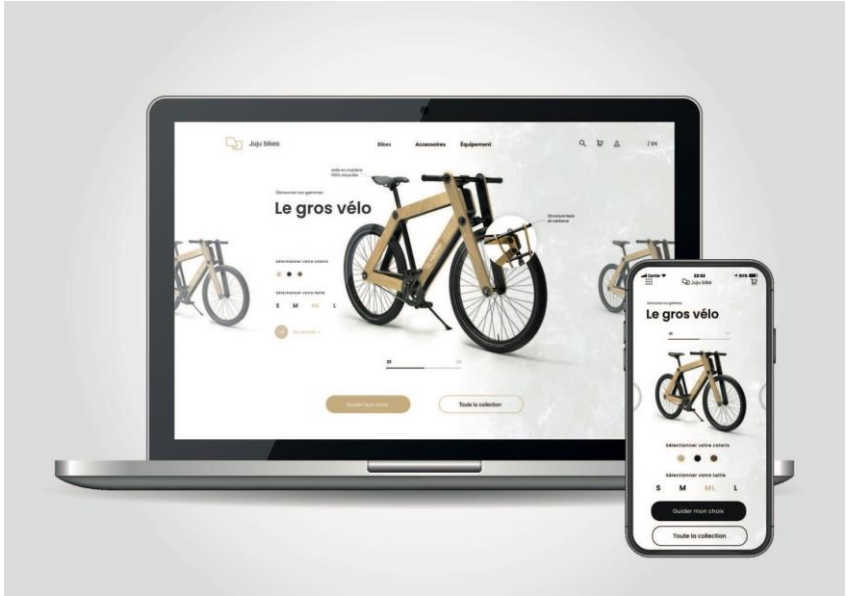
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# First ideas from THINK TANK from design fiction work sessions

Découvrez l'app  
Juju on the move  
la station partagée



Juju bikes



Mountain bikes made in Jura