



**La Région**  
Auvergne-Rhône-Alpes



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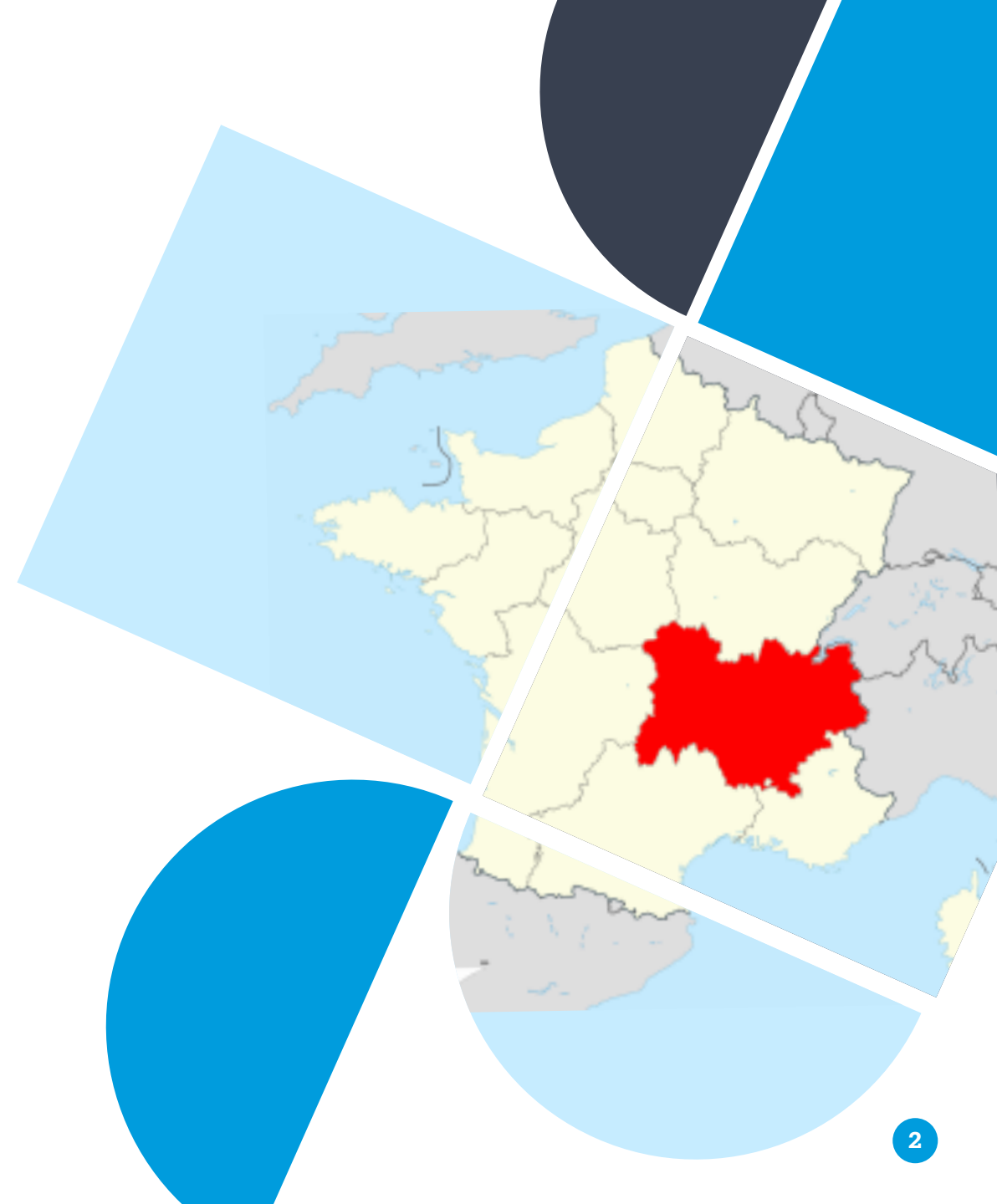
# ZERO EMISSION VALLEY

Mathilde CADIC – Brussels office



**La Région**

Auvergne-Rhône-Alpes



# ZERO EMISSION VALLEY



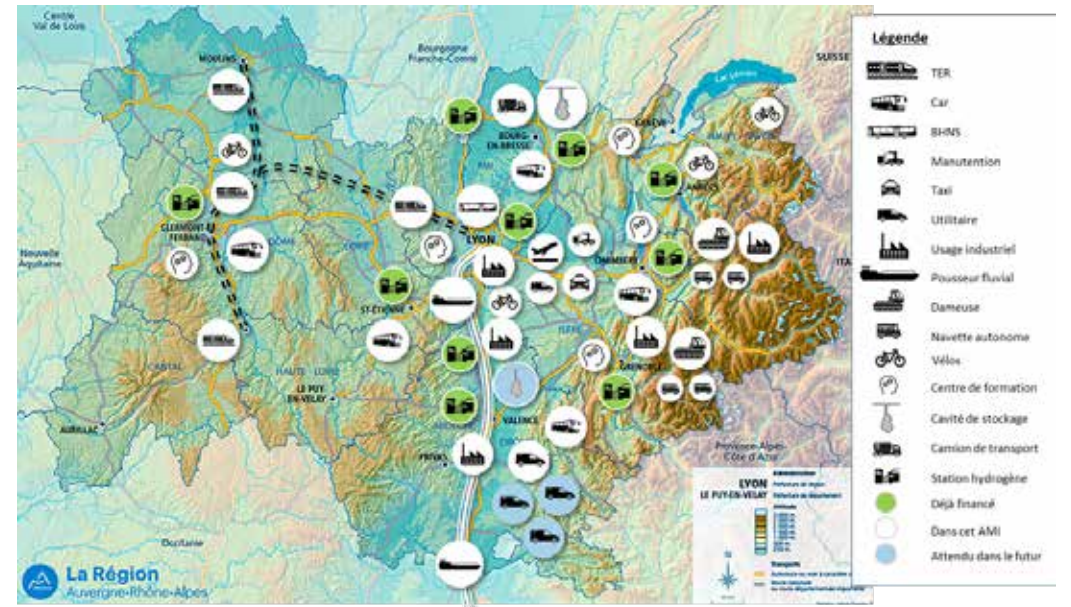
## Environmental issues

- Concentration of nitrogenoxides:
  - > in urban areas
  - > in industrial valleys surrounded by mountains
- Target: 43 000 T de CO2 avoided per year, including 25% for mobility uses



## Economical support

- 80% of the French hydrogen value chain is located in the region
- 1st region in producing renewable energies thanks to hydroelectricity
  - > in industrial valleys surrounded by mountains
- Target: 43 000 T de CO2 avoided per year, including 25% for mobility uses





# ZERO EMISSION VALLEY

Simultaneous roll out of:



1200 H2  
LIGHT VEHICLES

&

20 CLEAN H2  
REFUELLING STATIONS



# ZERO EMISSION VALLEY

Financial partners: 50 M€



10 M€



15 M€

## SHAREHOLDERS WITHIN



# ZERO EMISSION VALLEY

1200 H2 light vehicles  
deployment by 2023

RENAULT KANGOO  
Symbio packs



HYUNDAI NEXO



TOYOTA MIRAI



# ZERO EMISSION VALLEY

## 1200 H2 light vehicles deployment by 2023

### Regional & European subsidies

	Petite Entreprise, Collectivités et Associations			Moyenne Entreprise			Grande Entreprise		
km/an pendant 4 ans	Subvention de la Région	Subvention de l'Union européenne avec station ZEV	Subvention totale	Subvention de la Région	Subvention de l'Union européenne avec station ZEV	Subvention totale	Subvention de la Région	Subvention de l'Union européenne avec station ZEV	Subvention totale
<b>8 à 13000</b>	2 700	3 400	<b>6 100</b>	2 700	3 400	<b>6 100</b>	2 400	3 400	<b>5 800</b>
<b>13001 à 25000</b>	4 200	3 400	<b>7 600</b>	4 200	3 400	<b>7 600</b>	3 700	3 400	<b>7 100</b>
<b>&gt;25000</b>	8 600	3 400	<b>12 000</b>	8 600	3 400	<b>12 000</b>	7 800	3 400	<b>11 200</b>

### National subsidies

	Petite Entreprise	Moyenne Entreprise	Grande Entreprise
<b>50 Véhicules 'Taxi'</b>	<b>21 000</b>	<b>16 500</b>	<b>12 000</b>
<b>148 Fourgons</b>	<b>25 200</b>	<b>20 000</b>	<b>14 800</b>
<b>2 bus</b>	<b>302 500</b>	<b>247 500</b>	<b>192 500</b>



# ZERO EMISSION VALLEY

## 20 clean H2 refuelling stations



### MOST ADVANCED PROJECTS:

- Chambéry: Feb 14th 20
- Clermont-Ferrand: 2021
- Moutiers
- Grenoble
- Lyon
- Saint-Etienne
- Bourg-en-Bresse

**3** large capacity electrolyzers (over 100 MW)

# ZERO EMISSION VALLEY

## H2 HUB Auvergne-Rhône-Alpes Focus on mobility

- **Regional public transport**

- > Trains
- > Small buses
- > Coaches
- > Buses

- **New applications**

- > Garbage trucks
- > Snow groomers for ski resorts
- > Autonomous shuttles
- > Boats on Rhône river



- **H2 ecosystem:**

- > **Clusters:** CARA -TENERDIS -AXELERA
- > **Refueling stations:** Mc Phy, Ataway, AIR LIQUIDE, CNR, Hymulsion
- > **Fuel cells:** Symbio, Faurecia, Addup
- > **Power electronic:** Alstom, Adetel
- > **On board storage:** Plastic Omnium, Staübli
- > **Manufacturers:** Renault Trucks, IVECO, VOLVO, CRMT, Trouillet, Navya, Addbike, Poma, Michelin,
- > **Operators:** BETI, Berthelet
- > **RTOs:** CEA Iiten, CNRS, Gustave Eiffel
- > **Security -regulation:** CETU, INERIS
- > **Test centers:** Transpolis, Greenmo



# ZERO EMISSION VALLEY

Auvergne-Rhône-Alpes European Leading region on Hydrogen technologies

- **Member of the Clean hydrogen Alliance**
- **Co leader of the S3 Hydrogen Valleys partnership**  
50 region & cities from 13 European countries engaged
- **Leader the EUSALP working group on H2**

European Clean  
Hydrogen Alliance



EUROPEAN HYDROGEN  
VALLEYS PARTNERSHIP





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