

Instruments to support projects deployment in France : ADEME experience

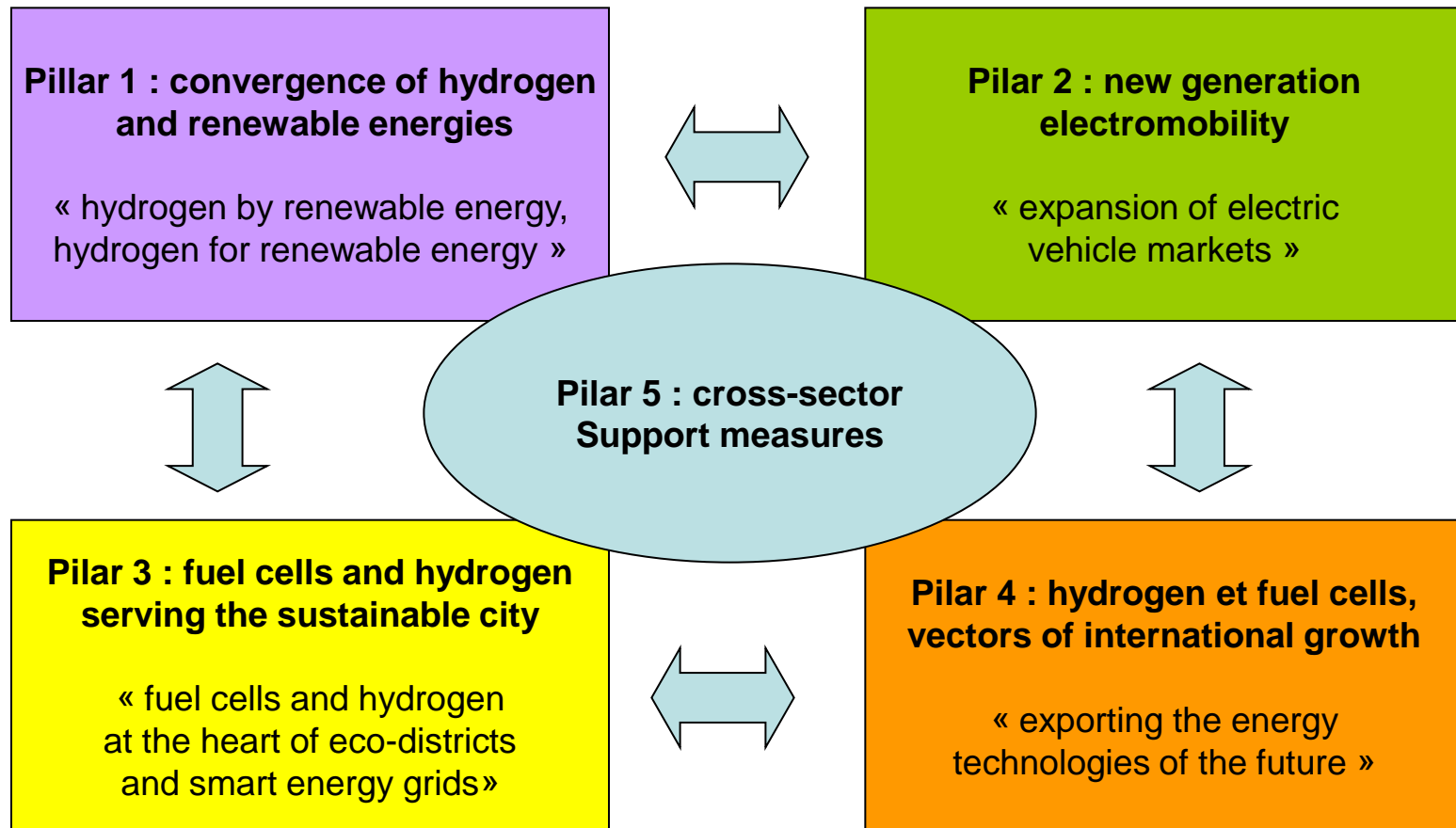
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RDDI in France: What has been done

- 2000 – 2004 : Launching Programs → ~6 M€/year
- 2005 – 2007 : Focus on transport and PEMFC → 25 M€/year (ANR)
- 2008 – 2010 : Automotive industry involvement and budget decrease → 8 M€/year
- 2008 – 2013 : Towards innovation (H2E – 67 M€) (OSEO))
- 2011... French Roadmap, prioritisation (the 5 Pilars)
Investments for the future (ADEME)

Strategic framework for 2020



Pillar #2: priorities for mobility

To combine Batterie Power and FC Energy

	Power	Energy	Markets	RDDI (ST) FC-H2
Walkers	<100 W	<0,5 kWh		
Cycles	<500 W	<1,5 kWh		Batteries
Tricycle / Quad	<5 kW	<10 kWh		Batteries
Special vehicles (forklift/logistic)	<15 kW	< 20 kWh		local
Small urban vehicles (services)	<20 kW	>15 kWh		fleet
River shuttles	<20 kW	>15 kWh		local
Small utility vehicles : Delivery	<30 kW	>15 kWh		fleet
Estate cars / Commercial 3t5	>50 kW	> 60 kWh		
Bus				
Trucks				
Locomotive				
Ship				

French stake-holders

- An active community (1 200 people), partially structured around AFHYPAC :
 - *Public R&D : CEA, CNRS and Universities*
 - *Some large companies today involved : Air Liquide, Michelin, GdF-Suez, AREVA*
 - *Some SME's positionned in all the value chain : McPhy, CETH2, Paxitech, Symbio FC, Raigi, Ullit, etc.*
 - *Local associations (Phyrénées, Mission H2 ...)*
- Public supports : ANR, Oséo, ADEME, Local authorities
- Ambitious on going projects...

Pre industrial demonstrators

- Hydrogen & FC eligible to the « Programme Investissements d'Avenir » (Investments for the future), launched in 2011, partially operated by ADEME
- Targets :
 - *To demonstrate technical & economical relevance*
 - *To prepare deployments : social feasibility, industrial stakeholders*
- Projects selected, in instruction :

Mobility (private vehicles & river fleets)	5 Projects
Stationnary (housing & industry)	2 Projects
Low carbon production	2 Projects
Micro FC	1 Project
TOTAL	10 Projects // 120 M€

Thank you for your attention !

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