



Strategic analysis of Danish Export potential related to the French EU recovery action plan "France Relance" with a sustainability focus



Context (I)

- « France Relance » is an economic recovery plan launched by the government in 2020 following the COVID crisis
- It aims at addressing the **short-term economic downturn** caused by the pandemic, but also shaping the French economy in the **long-term through structural changes**
- The plan amounts to 100 B€¹ and is partially financed by the EU recovery fund called "Next Generation EU". France Relance represents the largest recovery plan in Europe, in GDP percentage (9,5%)²
- This plan intends to reinforce France's recent efforts to play a leading role in driving the green agenda at the European and international level (i.e. Paris agreement)
- Almost a third of the plan is dedicated to **sustainability**, through the financing of projects that aim at improving energy efficiency in various French sectors.

 $^{2\,\}underline{\text{https://www.euractiv.fr/section/economie/news/france-relance-ce-plan-est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-en-forte-et-avec-celui-de-la-commission-europeenne/est-$





¹ https://www.gouvernement.fr/france-relance

Roadmap

Context

Context (II)

- The Danish Embassy has funded a study to assess the French recovery plan and related market opportunities for Danish companies, in order to help them export their services and solutions to the French market
- In this respect, I Care & Consult, a French strategy and environment consulting company, has carried out a thorough analysis of the France Relance plan, summarized in this final report.
- The main objectives of the latter are:
 - To give an overview of the France Relance plan
 - To describe in more details the major programs at play, concerning three strategic sectors
 - To provide Danish firms with some guidelines on how to harness the numerous market opportunities offered by the plan



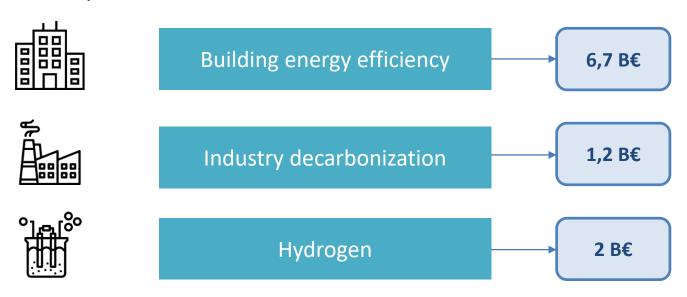


Main Findings (I)

• The study focuses on **three sustainability sectors** in which Danish companies have a leading edge or strategic development of products & processes

Context

 Below, a breakdown of the funds allocated to the three target sectors over the 2020-2022 period*:



^{*} Additional funds may be granted after 2022 through an extension of the plan





Main

Findings

Context



Building renovation

- The French government is spending unprecedented figures to turn previously announced ambitions, in terms of building renovations and refurbishments, into reality
- The scale of the sums mobilized is expected to bring benefits well beyond energy efficiency and to help raise customer expectations, making Danish products and know-how more attractive

Industry decarbonization

- The covid-19 crisis has highlighted the vulnerability of globalized production chains and France is now keen to maintain industrial activities in France
- With increasingly stringent European environmental regulations, to do so,
 France needs to upgrade and invest in its industry
- Denmark has been ahead of the game on that front and has therefore a lot to offer. For Danish companies, teaming up with French giants such as Saint-Gobain, Vicat or ArcelorMittal can open up fantastic market opportunities.





Main

Context

Main findings (III)

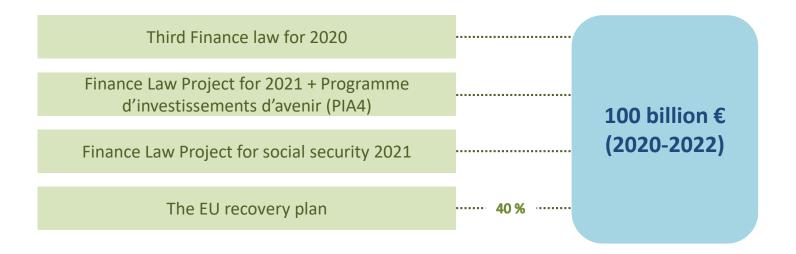
Hydrogen

- Like many other European countries today, France is massively investing in this promising energy source
- The ambitious funds from France Relance, which could reach up to 7,2 billion euros by 2030, aim at **bolstering an efficient French production chain for** green hydrogen, but also at generalizing its uses, namely for heavy mobility
- This offers Danish players, including start-ups, the opportunity to be involved in ambitious R&D projects and potentially work with energy giants like Total, Engie, Areva, etc.





France Relance Plan: a 100 B€ recovery plan set to be spent over the 2020 – 2022 period







Three main priorities for France Relance Plan

3 top priorities

2. Competitiveness 1. Sustainability 3. Cohesion • Refurbishment of buildings towards greater energy efficiency Taxation of companies Health plan Major targets Urban densification, biodiversity Technological sovereignty Support to young people Decarbonization of the industry Control and diffusion of digital Maintaining jobs and skills Agricultural transition Support to vulnerable and technologies · Circular economy and short Long-term financing of precarious populations Support to territories (regions circuits companies Green tech and renewables and departments) · Infrastructure and green mobility 30 Billion € 34 Billion € 36 Billion €







Analysis of priority sectors – Focus on the energy efficiency of buildings

Targets for energy efficiency of buildings in France

Building refurbishment and energy efficiency plan (PREH) 2020-2022 2030-2050 2022-2025 2025-2030 Reduce cons.15% **Objectives** Renovate 500 000 buildings/year Renovate all « thermal sieves » Reduce final consumption by 38% in comparison to 2010 Renovate the whole housing stock in line with BBC certification Reduce final consumption 67% /2010

Legislative framework

RE2020

Loi Energie Climat

What the plan entails

6,7 billion €

(2020-2022)

Refurbishing of private **buildings** Refurbishing of public buildings

Refurbishing of small

housing

husinesses

0,2

Proposed programs

Refurbishing of social

Increased subsidies through the MaPrimeRenov' program, for owners, housing lots, lessors

2 calls for tenders: 1 for buildings of the education and research sectors, the other for other public buildings

Detailed information

Call for tenders: EnergieSprong

Tax credits for tertiary sector businesses, subsidies for craftsmen and independent businesses, subsidies for investments in ecodesigned products, action plans for companies engaged in the energy transition (EETE)

Involved actors

Agence Nationale de *l'Habitat (ANAH)*

Direction de l'Immobilier de l'Ftat (DIE)

ADEME. GreenFlex

ADEME, DGE, CMA France, CCI France







Although the public building renovation program is already closed, 4 other refurbishment programs are still available

	Public buildings	Private housing	Social housing	Small & medium businesses	Public buildings: health & social, education	
Calls for tenders / Program		MaPrimRenov'	Energiesprong, Regional calls	Tax credits, counseling programs (SARE)	ACTEE II: Charme, Eucalypt., Sequoia	
	Major maintenance works (insulation, equipment	Heating system replacement	Highest standard refurbishment (BBC, for ex.)	Insulation (walls and panes)	« Economes de flux » (counseling refurbishment	
Project types/ Requirements	renewal) Quick-win projects	Insulation (walls, attic, windows)	Industrialization of	Ventilation / air conditioning New heating	studies) Small equipments	
	(heating control systems)	Ventilation system	Energiesprong projects		and measurement devices Audits, funding and	
	Other real-estate	installation		equipments		
	projects (comfort, accessibility)	Overall refurbishment	Heavy restructuring	Counseling services	investment strategies	
	Reconnu garant de l'environnement (RGE) certification for the realization of works					
Schedule	Closed Start: January 2021		Start: Spring 2021	Start: January 2021; End 2022	Several dates 2021	
Involved actors	Direction de l'immobilier d'Etat		ADEME, DREALs, GreenFlex	ADEME	FNCCR, Collectivités	
Funding (M€)	4000	2000	500	105	Part of the 4000 (public buildings)	







Analysis of priority sectors – Focus on industry decarbonization

Major decarbonization levers

Energy efficiency

New processes (electrolysis, chemical recycling...)

Switch to new energy sources (biomass, renewables...

1,2 billion €

(2020-2022)

CCU & CCS

Material efficiency (use of recycled products and materials...)

0,6

0,6

Target sectors

Alu. Cement **Steel**

Chlore Ammon. **Paper**

Ethylene Sugar

Legislative framework

Decree n°2020-1485 (Dec.1st, 2020)

Loi Energie-Climat

What the plan entails

Proposed programs

Support to energy efficient processes, and to their electrification

Support to low-carbon heating

Detailed information

Glass

Focus on carbon-intensive sectors (cement, metals...)

Calls for tenders (INDUSEE): for projects over 3M€. First one in August for energy efficiency investments Calls for expression of interest (IndusDecar): for process transformation projects (ex: electrification)

Target: investments and operations (biomass, fuel from waste), to compensate the cost differences with fossil fuel-based heating

Calls for tenders: BCIAT, 2020-22

Involved actors

ADEME, Agence de services et de paiement (ASP)







Four major calls for tenders to decarbonizing the industry, with a focus on heating and overall energy efficiency

	Support to low-carbor	n heating for industries	Support to energy efficiency of industries			
	Installation of a Solid Recovered Fuel Unit	Investments in new biomass heating equipments > 12 000MWh/y + OPEX	Decarbonization of industrial sectors, energy efficiency measures CAPEX>3M€	Decarbonization solutions other than energy eff./low-carbon heating		
Calls for tenders / Calls for interest	CfT CSR	CfT BCIAT	IndusEE	Cfl IndusDecar		
	Able to function with SRF and biomass	Forest residues, industry/agric. by-	Heat catchment systems (distillation columns,	Electric furnaces		
Project types/ Requirements	Mature technologies only	products, wood pellets Automatic supply systems, biomass heating	furnaces) for heat recovery	Resistances Electrochemistry		
	(TRL9)	generators, storage equipment of biomass	Heat pumps, steam mechanical compression systems			
	Priority: units fed by economic waste,	fuel, engineering expenses, smoke treatment systems,	Cooling systems (absorption groups)	Mechanical Vapor Compression (MVC), heat		
	packaging, paper, recycling rejects	energy metering equipments, district heating installation	Heat storage and transportation systems	pumps Material efficiency/recycling, clinker substitution		
Schedule / Deadline	1 st CfT : closed 2 nd CfT 2021	1stCfT: closed 2nd CfT 2021	1 st CfT : closed 2 nd CfT 2021 3 nd CfT 2022	1stCfT: closed 2nd CfI 2021 3nd CfT 2022		
Involved actors	ADEME					
Funding (M€)	6	500	600			







Analysis of priority sectors – Focus on hydrogen

Three main priorities

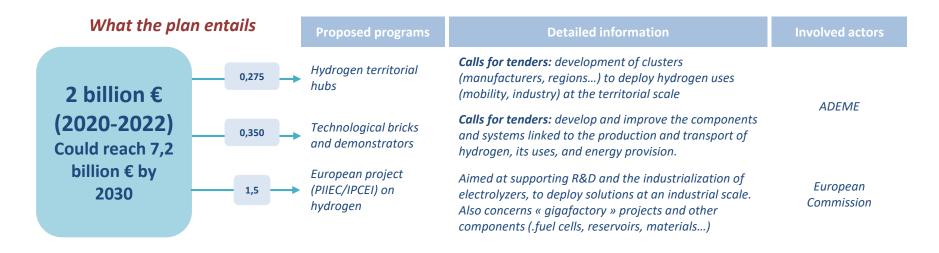
- 1. Decarbonize the industry through the development of a French electrolysis channel
- 2. Develop green hydrogen for the decarbonization of heavy transport
- 3. Supporting research and innovation for future green hydrogen uses

Legislative framework

Loi d'orientation des mobilités (LOM)

Decree n°2020-1485 (Dec.1st, 2020)

Loi Energie-Climat









Two major calls for tenders in H2 officially announced. One focusing on local production and consumption and the other on industrial R&D

	Technological bricks and hydrogen demonstrators				Territorial hydrogen hubs: actual H2 consumption (as a raw material or utility) and energy uses: >1MWe			
	Technologic al bricks	Innovative Pilot projects	New vehicles & equipment	Innovative electrolysis demonstrato rs	Production, distribution on a territory	PEM or Alkaline Electrolyzers /Distribution	Industrial uses (prod & distribution)	H2 Mobility: professional fleets
Project types/ Requirement s	H2 production components H2 transport	H2 or synthetic CH4 use for the industry Electric/gas interactions, gas conversion local H2 loops Decentralize d energy	Heavy mobility (buses, trucks)	Mature technologies, that can be marketed already Projects which include circular economy and eco- conception principles	Mutualisatio n of uses (industry/m obility)	Supplied by electricity or renewables	Consumer identification	Utility vehicles
	distribution H2 Fuel cells heavy mobility Components for H2 combustion Auxiliary components		Ships Rail vehicles		Consolidate existing ecosystems (infrastructu	50% of production capacities covered by already identified users	Suppliers for the equipments of the project	Heavy terrestrial vehicles
			Off-road (handling and construction)		re) New fleets Stationnary uses			Coastal or fluvial ships
Schedule / Deadline	31st Dec. 2022			16th March 2021; 14th September 2021				
Involved actors	ADEME (Programme d'Investissements d'Avenir, PIA)				ADEME			
Funding (M€)	350			275				







Important links

Building renovation

- https://www.maprimerenov.gouv.fr/
- https://www.programme-cee-actee.fr/
- https://www.ademe.fr/sare-service-daccompagnement-a-renovation-energetique
- http://www.energiesprong.fr/

Industry decarbonization

- https://appelsaprojets.ademe.fr/aap/BCIAT2020-173
- https://www.economie.gouv.fr/plan-de-relance/profils/entreprises/decarbonation-industrie-soutien-chaleur-bas-carbone
- https://appelsaprojets.ademe.fr/aap/IndusEE2020-162
- https://appelsaprojets.ademe.fr/aap/IndusDECAR2020-159

Hydrogen

- https://agirpourlatransition.ademe.fr/entreprises/dispositif-aide/20201013/inodemoh22020-176
- https://agirpourlatransition.ademe.fr/entreprises/dispositifaide/20201013/ecosysh22020-165





Recommendations to Danish companies: roadmap to access market opportunities provided by France Relance

- For all three target sectors, Danish companies may present an added value on French markets for equipments, components or activities such as contracting, engineering and studies
- Danish companies producing specialized high-quality and cost-efficient products (for heating or energy efficiency, for example) may present an advantage on the French market
- In order to access the France Relance programs, Danish companies will therefore need to become visible on the French market and build up partnerships with French companies
- It is therefore important for Danish companies to structure their export plan
- The Danish Embassy will coordinate the dissemination of information related to the French recovery plan, including operational details on the various programs, as well as key contacts in France. Themed workshops will be organized to discuss the specificities of the French market.
- **Getting in contact with the Embassy** therefore guarantees efficiency in tackling the opportunities provided by France Relance





Next steps

- A **virtual presentation** of the report, free of charge for Danish Companies, with the Danish Embassy and I Care & Consult and relevant French stakeholders will take place on **March 9**th from 2 to 4pm.
- During this webinar The Danish Trade Council in Paris will present upcomming activities that Danish companies can join related to the France Relance programmes. Interested participants are required to register via the following link:
- https://dmfa.webex.com/dmfa/onstage/g.php?MTID=e6d0d87fba1e77ddbd732dc6fab 7fa959
- For further information please contact one of the Danish Trade Council Paris' Energy Sector advisor's:
- -> Ms. Karen-Luise Johansen Geslin (karges@um.dk) +33144312118
- -> Ms. Asmara Klein (<u>asmkle@um.dk</u>) +33144312122
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