

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

February 2021

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.

¹ <https://www.gouvernement.fr/france-reliance>

² <https://www.euractiv.fr/section/economie/news/france-reliance-ce-plan-est-en-forte-resonance-avec-le-plan-allemand-et-avec-celui-de-la-commission-europeenne/>

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



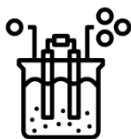
Building energy efficiency

6,7 B€



Industry decarbonization

1,2 B€



Hydrogen

2 B€

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

Main findings (II)

- ***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

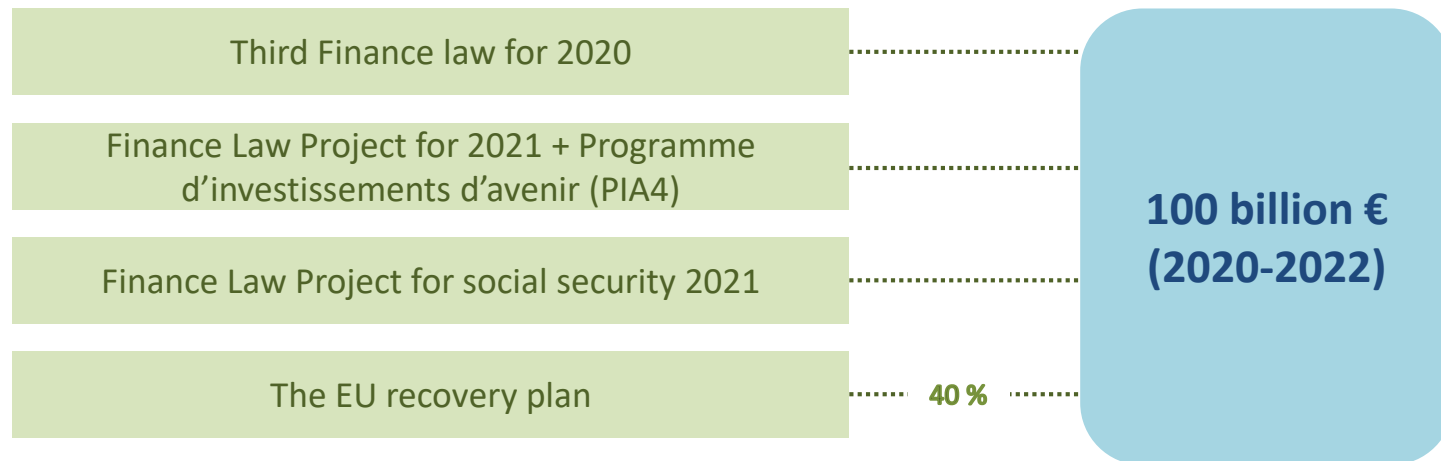
- ***Industry decarbonization***

- 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 findings (III)

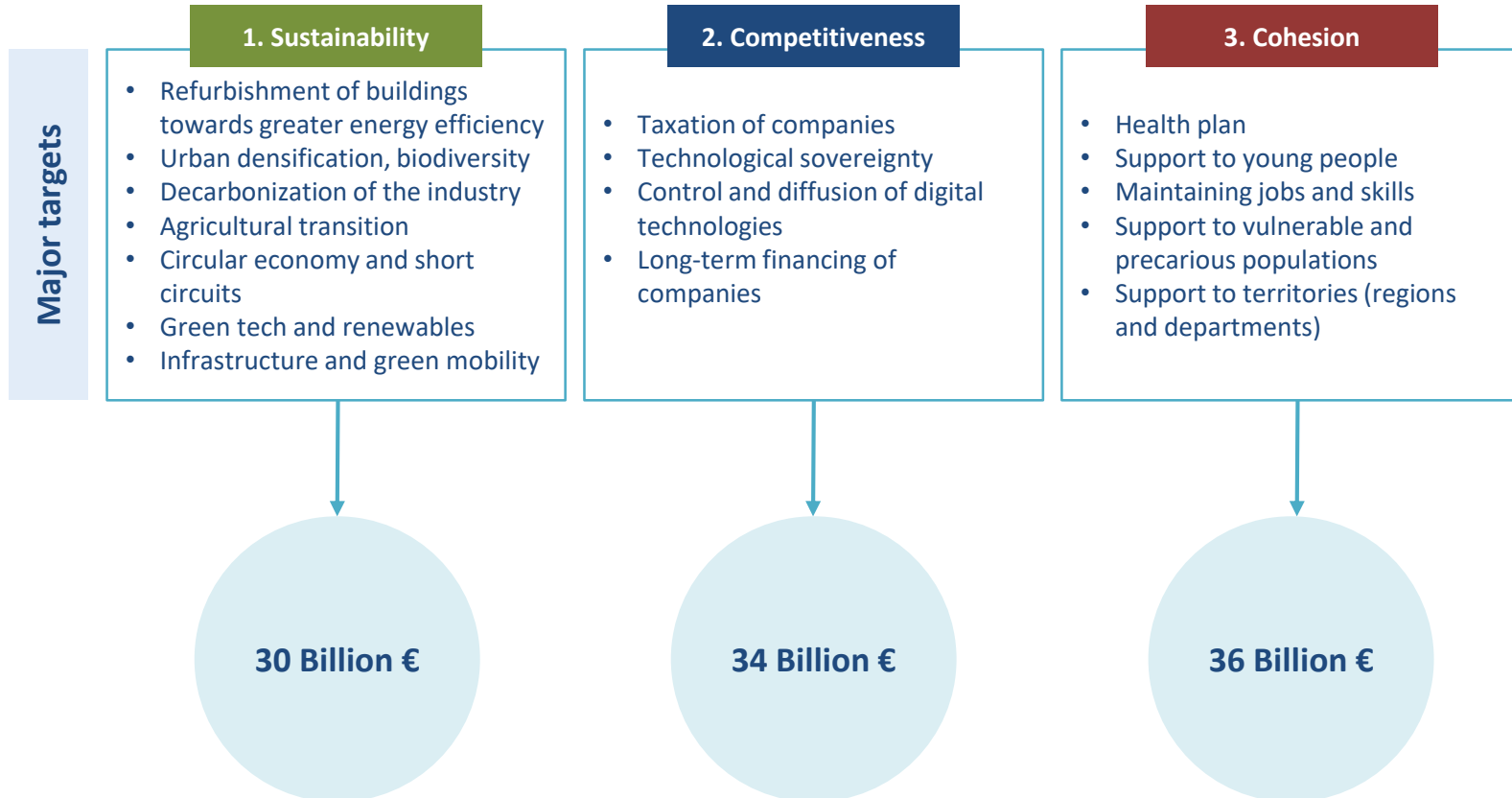
- **Hydrogen**
 - Like many other European countries today, France is massively investing in this promising energy source
 - The ambitious funds from France Relance, which could reach up to 7,2 billion euros by 2030, aim at **bolstering an efficient French production chain for green hydrogen**, but also 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

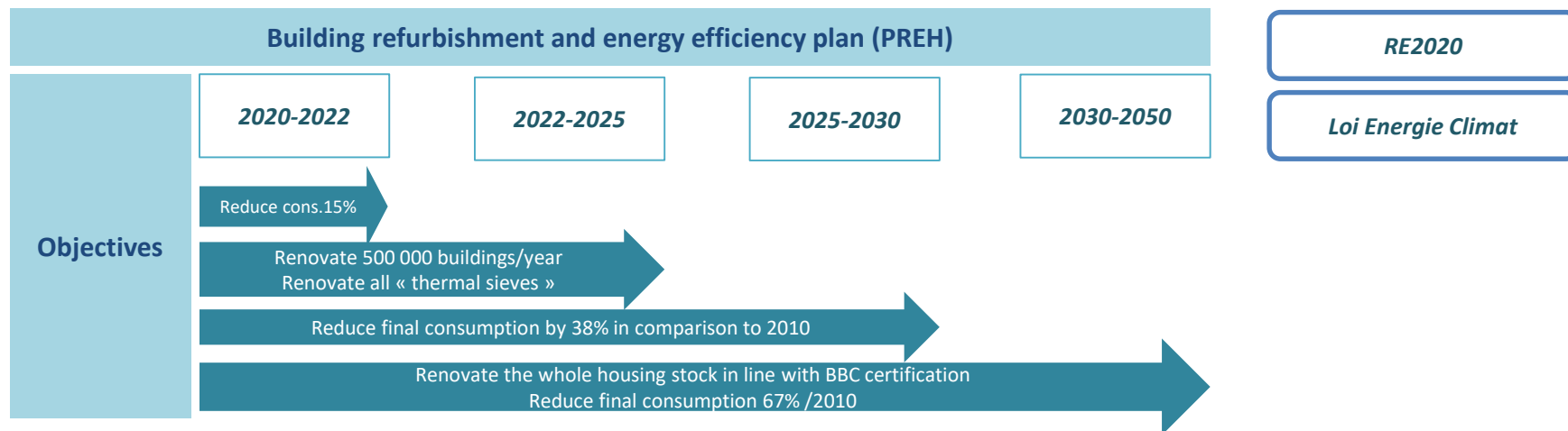




Analysis of priority sectors – Focus on the energy efficiency of buildings

Targets for energy efficiency of buildings in France

Legislative framework



What the plan entails

	Proposed programs	Detailed information	Involved actors
6,7 billion € (2020-2022)	2 → Refurbishing of private buildings	Increased subsidies through the MaPrimeRenov' program, for owners, housing lots, lessors	Agence Nationale de l'Habitat (ANAH)
	4 → Refurbishing of public buildings	2 calls for tenders: 1 for buildings of the education and research sectors, the other for other public buildings	Direction de l'Immobilier de l'Etat (DIE)
	0,5 → Refurbishing of social housing	Call for tenders: EnergieSprong	ADEME, GreenFlex
	0,2 → Refurbishing of small businesses	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)	ADEME, DGE, CMA France, CCI France



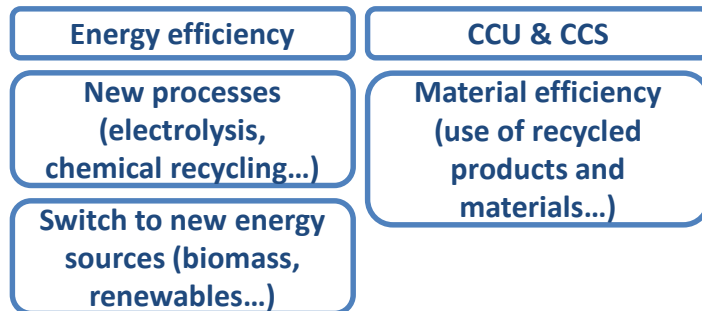
Although the public building renovation program is already closed, 4 other refurbishment programs are still available

	Public buildings	Private housing	Social housing	Small & medium businesses	Public buildings: health & social, education
Calls for tenders / Program		<i>MaPrimRenov'</i>	<i>Energiesprong, Regional calls</i>	<i>Tax credits, counseling programs (SARE)</i>	<i>ACTEE II: Charme, Eucalypt., Sequoia</i>
Project types/ Requirements	Major maintenance works (insulation, equipment renewal...)	Heating system replacement	Highest standard refurbishment (BBC, for ex.)	Insulation (walls and panes)	« Economies de flux » (counseling refurbishment studies)
	Quick-win projects (heating control systems...)	Insulation (walls, attic, windows...)	Industrialization of Energiesprong projects	Ventilation / air conditioning	Small equipments and measurement devices
	Other real-estate projects (comfort, accessibility...)	Ventilation system installation	Heavy restructuring	New heating equipments	Audits, funding and 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

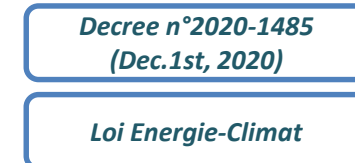
Major decarbonization levers



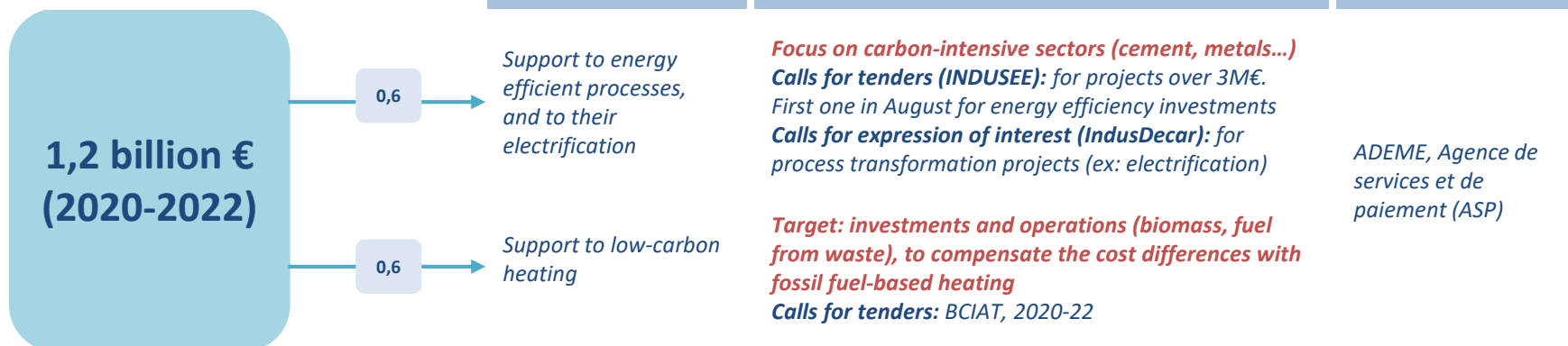
Target sectors



Legislative framework



What the plan entails





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

	Support to low-carbon 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	<i>CfT CSR</i>	<i>CfT BCIAF</i>	<i>IndusEE</i>	<i>CfI IndusDecar</i>
Project types/ Requirements	Able to function with SRF and biomass	Forest residues, industry/agric. by-products, wood pellets	Heat catchment systems (distillation columns, furnaces...) for heat recovery	Electric furnaces
	Mature technologies only (TRL9)	Automatic supply systems, biomass heating generators, storage equipment of biomass fuel, engineering expenses, smoke treatment systems, energy metering equipments, district heating installation...	Heat pumps, steam mechanical compression systems	Resistances
	Priority: units fed by economic waste, packaging, paper, recycling rejects		Cooling systems (absorption groups...)	Electrochemistry
			Heat storage and transportation systems	Mechanical Vapor Compression (MVC), heat pumps
Schedule / Deadline	1 st CfT : closed 2 nd CfT 2021	1 st CfT : closed 2 nd CfT 2021	1 st CfT : closed 2 nd CfT 2021 3 rd CfT 2022	1 st CfT : closed 2 nd CfI 2021 3 rd CfT 2022
Involved actors	ADEME			
Funding (M€)	600		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

What the plan entails

**2 billion €
(2020-2022)
Could reach 7,2
billion € by
2030**

0,275

Hydrogen territorial
hubs

0,350

Technological bricks
and demonstrators

1,5

European project
(PIIEC/IPCEI) on
hydrogen

Proposed programs

Detailed information

Involved actors

Calls for tenders: development of clusters
(manufacturers, regions...) to deploy hydrogen uses
(mobility, industry) at the territorial scale

ADEME

Calls for tenders: develop and improve the components
and systems linked to the production and transport of
hydrogen, its uses, and energy provision.

Aimed at supporting R&D and the industrialization of
electrolyzers, to deploy solutions at an industrial scale.
Also concerns « gigafactory » projects and other
components (.fuel cells, reservoirs, materials...)

European
Commission



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			
	Technological bricks	Innovative Pilot projects	New vehicles & equipment	Innovative electrolysis demonstrators	Production, distribution on a territory	PEM or Alkaline Electrolyzers /Distribution	Industrial uses (prod & distribution)	H2 Mobility: professional fleets
Project types/ Requirements	H2 production components	H2 or synthetic CH4 use for the industry	Heavy mobility (buses, trucks...)	Mature technologies, that can be marketed already	Mutualisation of uses (industry/mobility)	Supplied by electricity or renewables	Consumer identification	Utility vehicles
	H2 transport distribution	Electric/gas interactions, gas conversion local H2 loops	Ships	Projects which include circular economy and eco-conception principles	Consolidate existing ecosystems (infrastructure...)	50% of production capacities covered by already identified users	Suppliers for the equipments of the project	Heavy terrestrial vehicles
	H2 Fuel cells heavy mobility	Decentralized energy supply	Rail vehicles		New fleets			Coastal or fluvial ships
	Components for H2 combustion		Off-road (handling and construction)		Stationary uses			
	Auxiliary components							
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-relande/profils/entreprises/decarbonation-industrie-soutien-chaleur-bas-carbone>
- <https://appelsaprojets.ademe.fr/aap/IndusEE2020-162>
- <https://appelsaprojets.ademe.fr/aap/IndusDECAR2020-159>

- ***Hydrogen***

- <https://agirpoulatransition.ademe.fr/entreprises/dispositif-aide/20201013/inodemo-h22020-176>
- <https://agirpoulatransition.ademe.fr/entreprises/dispositif-aide/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 9th from 2 to 4pm**.
- During this webinar The Danish Trade Council in Paris will present upcoming 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=e6d0d87fba1e77ddbd732dc6fab7fa959>
- For further information please contact one of the Danish Trade Council Paris' Energy Sector advisor's:
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