Empowering EU Fisheries Policy to Restore Marine Health, Tackle Climate Change and Create Jobs

Report Launch 19/04/2023





## Vertigo Lab



#### Founded in

2011



## BASED IN BORDEAUX. In the Darwin Ecosystem since 2014.



A multidisciplinary team **15 CONSULTANTS** researchers. economists.

engineers. Political scientists.



VERTIGO LAB is specialized in socioeconomic and environmental impact evaluation



Vertigo Lab helps policy makers. companies and territories at the **NATIONAL & INTERNATIONAL SCALES** with their strategies and policies to **ADRESS TOMORROW'S ISSUES** and **SUPPORT THE ECOLOGICAL TRANSITION.** 









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## **Study Implementation**

**Aim of the study:** to assess the socioeconomic and environmental benefits from transitioning to sustainable fishing practices

**Method:** Calculation of socioeconomic impacts of quotas' reallocation driven by social and environmental criteria

- Usage of ImpacTer model on current quota allocation for haddock fishing in France and Ireland, and for plaice fishing in Poland, Germany, Sweden, and Denmark
- 2. Selection of two environmentally-driven scenarios
- 3. Assessment of the scenarios' socioeconomic impacts onto the countries' fishing sectors



Our Fish





# Methodology



## **Environmental drivers**



Impacts	PASSIVE GEAR < 12m	PASSIVE GEAR 12–24m	PASSIVE GEAR > 24m	ACTIVE GEAR < 12m	ACTIVE GEAR 12–24m	ACTIVE GEAR > 24m
Unwanted catches	Very weak	Weak	Weak	Moderate	Strong	Strong
Impact on the seafloor	Weak	Weak	Weak	Moderate-Strong	Strong	Strong
Fuel usage for the landed volumes	Strong	Strong	Weak - Moderate	Moderate	Very strong	Weak
Total jobs for the landed volumes	Very strong	Strong	Strong	Moderate	Moderate	Weak

**Source:** Christelle Noirot, Céline Jacob, Morgan Raffray, Jean-Christophe Martin (Vertigo Lab), January 2022, "Study on Article 17 of the common fisheries policy. Methodological considerations of an allocation of fishing quotas based on social and environmental criteria", supported by the Greens-EFA group in the European Parliament

#### Categorisation based on:

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- The typology used from the DataCollection Framework of the Scientific,Technical and Economic Committee forFisheries (STECF)
- The fleet segments defined as groups of vessels of the same size class (Length Overall Measurement - LOA) and with a prevailing metier during the year according to European legislation



## ImpacTer methodology



#### DIRECTS IMPACTS - Flows injected into the economy by the organisation



**FISHING turnover** 

The method for evaluating the impacts of the fishing sector in European countries has been developped by Vertigo Lab and validated in a peer-reviewed scientific article.

RaffrayMorgan,Jean-ChristopheMartin,etCélineJacob.« Socioeconomic Impacts of Seafood Sectors in the European Unionthrough a Multi-Regional Input Output Model ». Science of The TotalEnvironment,August2022,157989.https://doi.org/10.1016/j.scitotenv.2022.157989.



# Main hypotheses





- Total quotas remain constant for each Member State and landed volumes use as quota 'proxies'
- Reallocations are supposed to be immediate in our modelling Potential rebound effects of such reallocation are not examined
- The structure of operating expenditures does not change within each category between the baseline and the scenarios.



## **Quota reallocation scenarios**











# Results



# The current effort distribution favours active and industrial vessels







PLAICE









DENMARK



■ P < 12 ■ P 12 - 24 ■ A < 12 ■ A 12 - 24 ■ A > 24



## Haddock Fishing





	GVA Type I	Original	Scenario 1	Scenario 2
"Made in the EU" impact multipliers	FRANCE	0.89	0.90	0.91
	IRELAND	0.87	0.88	0.89

#### Jobs:

- Scenario 1 generates a 9% increase and scenario 2 a 25% increase in the sector's number of supported jobs
- Quota reallocation to more artisanal fleets leads to job creation

#### **Economics:**

- Overall, revenues and GDP contribution remain stable so that quota reallocation does not impact the sector's economic outputs
- Quota reallocation leads to fewer wealth leakages and therefore more wealth retention within the European Union



**Plaice fishing** 





"Made in the EU" impact multipliers	GVA Type I	Original	Scenario 1	Scenario 2
	POLAND	0.87	0.72	0.86
	GERMANY	0.86	0.89	0.87
	SWEDEN	0.88	0.88	0.88
	DENMARK	0.85	0.86	0.84

Jobs:

- Scenario 1 generates a 14% increase in number of supported jobs, whilst the increase is 25% for scenario 2
- Quota reallocation to more artisanal fleets leads to job creation

#### **Economics:**

- Overall, observed revenues and GDP contribution slightly decrease. The downturn could be solved by reevaluating positively the prices of fish sold by smaller fleets equipped with passive gears
- Wealth leakages remain stable after quota reallocation





# Conclusion



## Take home messages





The reallocation of quotas in favour of environmental and social criteria appears to positively impact employment. The most beneficial scenarios changed depending on the country and the fishery.



Economically, quota reallocation does not impact the sector's outputs **granted** price schemes are normalized. There may be a need for subsidies redistribution\*.



The link to the territory, through national specificities, is crucial in the calculation of the socioeconomic impacts of fisheries and highlights the importance of evaluating quota reallocation to maximise both environmental and socioeconomic benefits on a case-by-case basis.





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Créé en 2011 et accueilli depuis août 2014 au sein de l'écosystème Darwin à Bordeaux, Vertigo Lab est un bureau de recherche et d'études, un think-&-do tank spécialisé en économie de l'environnement.