



KEEPING PACE WITH EUROPE TOWARD A SUSTAINABLE FUTURE

STRUCTURAL DRIVERS AND BARRIERS FOR LOW-CARBON LIFESTYLES IN SPAIN

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BACKGROUND AND PROBLEM STATEMENT

- **Background**
 - Limiting *global temperature* to **1.5° C** (UNFCCC, 2016).
 - **Rapid increase** in the impacts of climate change (IPCC, 2022).
 - **Exceeding** the 1.5° C target (IPCC, 2022).
 - Substantial change in lifestyles: reducing consumption (IPCC, 2022).
- **Problem statement:**
 - Factors promoting individual behavior changes but not **addressing the structural drivers & barriers** to adopt sustainable lifestyles in Spain

OBJECTIVE

Analyzing the most relevant **structural drivers and barriers** to adopt the **low carbon lifestyle options** within the **four main consumption areas** in Spain: nutrition, mobility, housing and leisure.



DATA AND METHODOLOGY

1

Literature review: Structural *Enablers and Barriers* on *Low-Carbon Lifestyles* in 4 main consumption fields.

2

Semi-structured interviews: 5 experts from different disciplines on sustainable consumption & production

3

Stakeholder Thinking Lab (STL): 22 academics & practitioners with expertise on sustainable production & consumption

DATA AND METHODOLOGY

Experts profile

Category	# of participants
Business (Energy, Construction, Food & Agriculture, Logistics/Food Distributor, Textile)	10
Expert (Academic)	3
NPO (Food, Environment, Textile)	4
Public sector	4
Journalist	1
Total	22

DATA AND METHODOLOGY

Future scenarios on *Sustainable Consumption* patterns in Spain

Nutrition

- Local & Seasonal consumption
- Ecological and environmentally friendly
- Prosumers & urban gardens
- Plant-based diet
- Reducing the single-use plastics

Mobility

- Walking & cycling
- Public transport
- Electric vehicles
- Car-sharing
- Better connection between rural areas and cities

Housing

- Energy efficiency (EE)
- Renewable energy sources
- Digitalisation
- Prosumers & energy security
- Common areas
- Rehabilitated buildings

Leisure

- Reduced working hours
- Workload optimization
- Sustainable travel & leisure
- Creative communities
- Virtual experiences

RESULTS: STRUCTURAL DRIVERS IN FOUR CONSUMPTION FIELDS IN SPAIN

Driver Theme	Nutrition	Mobility	Housing	Leisure
Holistic policy framework	<ul style="list-style-type: none"> Livestock-to-Land Indigenous crops 	<ul style="list-style-type: none"> (Re-) Designing urban spaces Local policy targets 	<ul style="list-style-type: none"> Policy targets for Passive Houses Technical norms & regulations 	<ul style="list-style-type: none"> Standardization LCA Restricting pricing policies Product lifetime extension
Economic incentives and internalization of externalities	<ul style="list-style-type: none"> Reducing tax burden on local producers Green taxes on imported fruits 	<ul style="list-style-type: none"> Vehicle fleet & transportation network Incentivize public transport 	<ul style="list-style-type: none"> Tax benefits targeting multi-property owners 	<ul style="list-style-type: none"> Green taxes Green public procurement
Dissemination of Good practices	<ul style="list-style-type: none"> Agriculture, livestock & food processing 		<ul style="list-style-type: none"> EE narratives & energy communities Efficient water management 	<ul style="list-style-type: none"> Good practices guide Rewarding communities
Sustainability education	<ul style="list-style-type: none"> Food & nutrition education Alternative economic models 	<ul style="list-style-type: none"> Specific educational modules Life-long learning 	<ul style="list-style-type: none"> Vocational training for housing rehabilitations 	<ul style="list-style-type: none"> Mandatory course Life-long learning
Social integration & equity	<ul style="list-style-type: none"> Administrative mechanisms 	<ul style="list-style-type: none"> Flat rate Free access 	<ul style="list-style-type: none"> Energy security & rehabilitation 	<ul style="list-style-type: none"> Training vulnerable groups Reserved contracts

RESULTS: STRUCTURAL BARRIERS IN FOUR CONSUMPTION FIELDS IN SPAIN

Barrier Theme	Nutrition	Mobility	Housing	Leisure
Economic incentives			<ul style="list-style-type: none"> • Lack of public funds for self-consumption 	<ul style="list-style-type: none"> • Incentivizing local-repair shops
Infrastructure	<ul style="list-style-type: none"> • Global seed adoption • Food security & nutritional deficiencies 	<ul style="list-style-type: none"> • Frequency of public transport • Urban-rural connection 	<ul style="list-style-type: none"> • Abandoned and energy-inefficient houses • Lock-in effects & fossil-fuel dependency 	<ul style="list-style-type: none"> • Lack of recreational areas • Lack of sustainable travelling options
Globalization & International Trend	<ul style="list-style-type: none"> • Dependence on imports in food production 			<ul style="list-style-type: none"> • Strong dependence on imports • Material & natural resource trade
Social norms & habits	<ul style="list-style-type: none"> • Eating habits • Non-nutritious food 	<ul style="list-style-type: none"> • Negative perceptions • Rapid consumption 	<ul style="list-style-type: none"> • Rebound effects 	
Knowledge & awareness	<ul style="list-style-type: none"> • Human-nature gap 		<ul style="list-style-type: none"> • Lack of technology literacy (EE) • Efficient energy use 	<ul style="list-style-type: none"> • Lack of required skills
Policy framework	<ul style="list-style-type: none"> • No restrictions on plastic packaging 		<ul style="list-style-type: none"> • Lack of energy advice centers 	

CONCLUDING REMARKS

- Developing a **holistic and consistent policy framework** considering the economic, social, technological aspects.
- Policy targets on **housing stock and mobility reduction**.
- Incentivizing **local and small producers**, as well as **circular economy business models**.
- Internalizing the **environmental costs** i.e. Green Taxes.
- Dissemination of **Good Practices** i.e. *Good practices guidelines*.
- Sustainability education beginning from early ages & life-long learning programs.
- Social integration i.e. providing **financial incentives** and **education** on sustainability practices for vulnerable groups.

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THANK YOU FOR YOUR ATTENTION!

ANY QUESTIONS OR SUGGESTIONS?

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