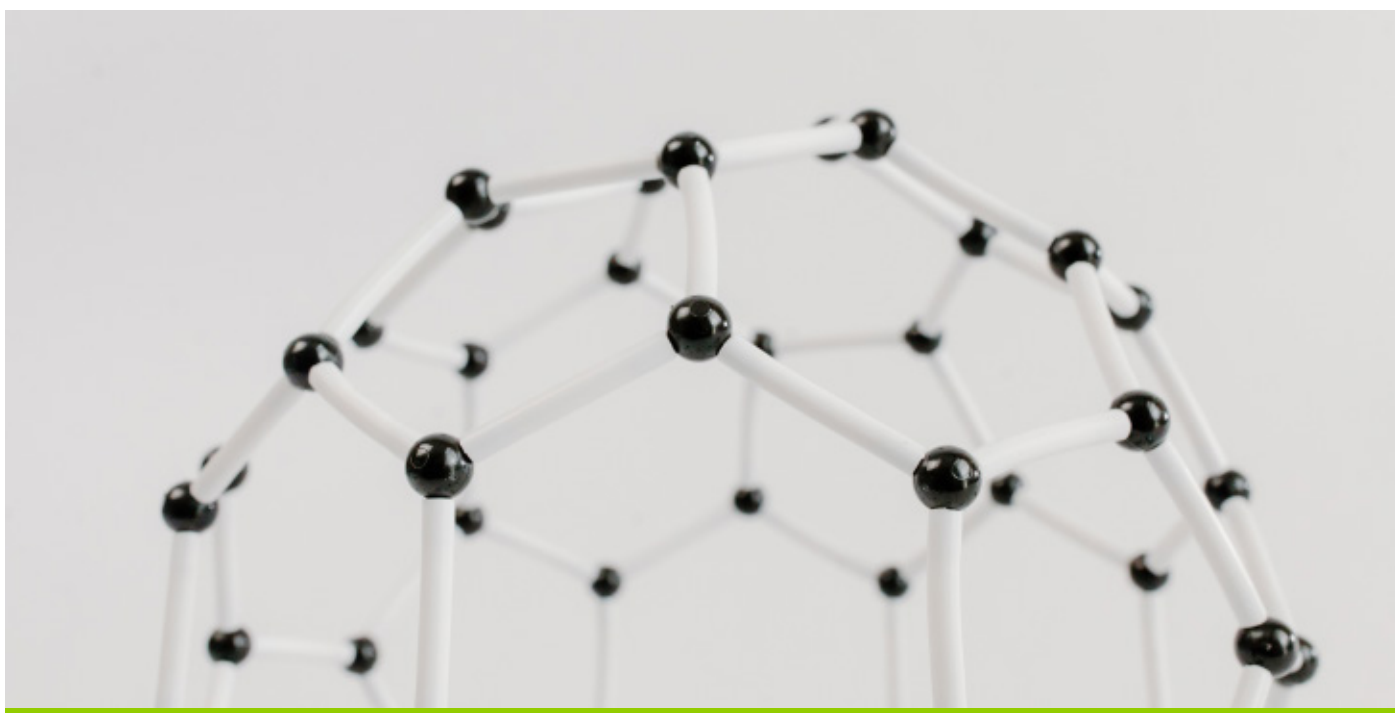


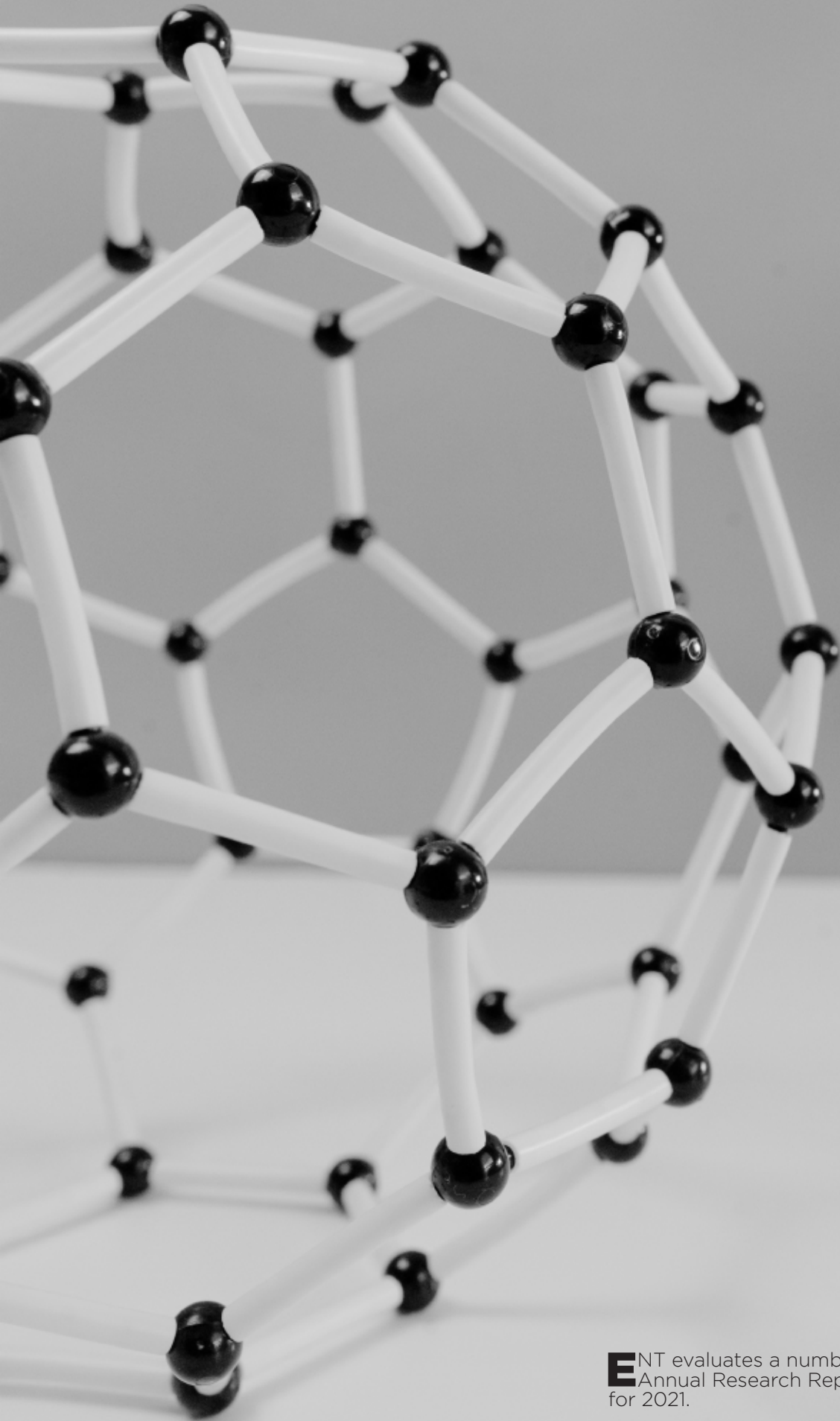
**ENT**

C/ Josep Llanza, 1-7, 2n 3a  
08800 Vilanova i la Geltrú  
+34 93 893 51 04  
[info@ent.cat](mailto:info@ent.cat) | [www.ent.cat](http://www.ent.cat)



# RESEARCH REPORT 2021





**E**NT evaluates a number of indicators through Annual Research Reports. Below are the results for 2021.

# 1 RESEARCH ARTICLES

## ARTICLES PUBLISHED AND ACCEPTED IN JOURNALS WITH IMPACT FACTOR

Bates, M. E., Ortega, M. et al (2021) Global COVID-19 lockdown highlights humans as both threats and custodians of the environment. *Biological Conservation*, 263, 109175.

Coll, M., Ortega-Cerdà, M., Mascarell-Rocher, Y. (2021) Ecological and economic effects of COVID-19 in marine fisheries from the Northwestern Mediterranean Sea. *Biological Conservation*, Volume 255, 108997

Font, D., Nechifor, V., Freire, J., Calzadilla, A. (2021) Economy-wide rebound makes UK's electric car subsidy fall short of expectations. *Applied Energy*, 297, 117138.

Freire-González, J. (2021) Governing Jevons' Paradox: Policies and Systemic Alternatives to Avoid the Rebound Effect. *Energy Research & Social Science*, 72, 101893.

Freire-Gonzalez, J., Martinez-Sanchez, V., Puig-Ventosa, I. (2022) Tools for a circular economy: Assessing waste taxation in a CGE multi-pollutant framework. *Waste Management* 139: 50-59.

Martinez Sanchez, V., Sastre Sanz, S. and Puig Ventosa, I. (2021) Review of economic and socio-economic studies on recycling topics. Publications Office of the European Union, Luxembourg. Doi:10.2760/041884, JRC126384.

Peñuelas, J., Germain, J., Álvarez, E., Aparicio, E., Arús, P., Basnou, C., Blanché, C., Bonada, N., Canals, P., Capodiferro, M., Puig, I., et al. (2021) Impacts of Use and Abuse of Nature in Catalonia with Proposals for Sustainable Management. *Land*, 10: 144.

## OTHER RESEARCH PUBLICATIONS IN 2021

Campos Rodrigues, L., Puig-Ventosa, I., Rubio Castillejo, M. A., Aguiló Martos, P., Pous Alo, M., Batlló Figols, G., Latres Simó, S. (2021) Análisis estadístico, seguimiento y prevención de la presencia de metales pesados en las depuradoras de Granollers, La Llagosta y Montornès del Vallès. *Tecnoaqua*, 51: 54-58.

Puig Ventosa, I. (2021) La fiscalidad en el Proyecto de Ley de Residuos y Suelos Contaminados. *RETEMA Revista Técnica de Medio Ambiente*, 232: 56-62.

Sastre, S. (2021) Resources Extraction, Trade and Waste Management: A Regional Approach to the Spanish Socioeconomic Metabolism. Phd Thesis. Institut de Ciència i Tecnologia Ambientals. Universitat Autònoma de Barcelona.

# 2 OWN PUBLICATIONS



## Are we watching the fisheries seaset?

In this “exploring paper” we study the evolution on the use of some key fisheries related words in English and Spanish books in the last 150 years as a first proxy of the evolution of the narratives.

[Ortega, M. \(2021\) Are we watching the fisheries seaset?. Fundació ENT.](#)

Two issues of the **Ecología Política** journal were coordinated and published:



## 62 Pandemias y crisis civilizatoria December 2021

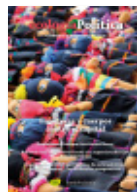
Pandemic is not only that disease that expands topographically, but also the ideal metaphor to understand the advancement of power patterns that are entrenched in the narratives of modernity, capitalism, patriarchy and coloniality. It explores the intrinsic relationship between the development of an unsustainable economic system, which goes beyond the physical limits of the planet, and the destruction of life on it.



## La aceleración azul del Mediterráneo español

It analyzes the acceleration of coastal uses and marine activity over the last six decades. It quantifies the evolution over time of fifteen indicators selected for the relevance and availability of long and reliable data series.

[Ortega, M., Coll, M., Gorostiza, S., Murray, I. \(2021\) La aceleración azul del Mediterráneo español. Informes exploratorios número 2. Fundació ENT.](#)



## 61 Cuerpos y fronteras contra el capital June 2021

This number focuses on conflicts and resistances against the advance of capitalism and repatriarchialization processes. Its 20 articles analyse peoples' resistances within different organization scales, where women and sexual-non-conformities play a major role in the defence of life.



## Las tasas de residuos en España 2021

Waste charges paid by households and commercial activities in 125 municipalities have been analysed, including all the provincial capitals. This study continues previous analyses performed with data from 2015, 2018, 2019 and 2020.

[Observatorio de la Fiscalidad de los Residuos \(2021\) Las tasas de residuos en España 2021. Fundació ENT.](#)



## Evolución de las tasas de residuos en España 2015-2021

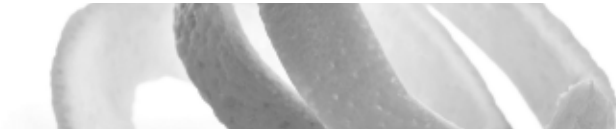
The report carries out a comparative analysis of the results obtained between 2015 and 2021. To this end, the main indicators used are analyzed, both qualitatively and quantitatively, providing a record of the evolution of waste charges in Spain.

[Observatorio de la Fiscalidad de los Residuos \(2021\) Evolución de las tasas de residuos en España 2015-2021. Fundació ENT.](#)

# 3 RESEARCH PROJECTS

**E**NT has carried out hundreds of projects at various levels (local, national regional and European) and for a large variety of clients (public administrations, NGOs, trade unions, universities, etc.) in different work areas. Our projects are mainly related to the development and implementation of public policies, focussed on their design, analysis and management.

Here is a summary of the 2021 highlights:



## **H2020 BIOCIRCULARCITIES: EXPLORING THE CIRCULAR BIOECONOMY POTENTIAL IN CITIES**

**Funded by BBI JU - European Commission**

Aims at supporting the development of innovative and comprehensive regulatory frameworks and roadmaps aligned with circular bioeconomy principles, centred on 'bio-based waste' and based on feedback from multi-actor participatory processes.



## **UNDERSTANDING ILLEGAL PLASTIC WASTE SHIPMENTS IN THE EU**

**Commissioned by Zero Waste Europe**

The aim of this project is to understand the factors enabling the misdeclaration of plastic waste exported from EU Member States, with particular interest for intra-EU flows. Besides some general considerations, the report will focus on the case of Spain.



## **RECYCLE: REVIEW OF ECONOMIC AND SOCIO-ECONOMIC STUDIES ON RECYCLING TOPICS**

**Commissioned by Joint Research Center - European Commission**

This project has carried out a systematic review of research and studies on the economic and socio-economic impacts of different recycling policies and pathways. In particular, three questions were addressed: First, which are theoretical arguments in favour of recycling, as opposed to, e.g. energy recovery or landfill? Second, which formal approaches and methodologies are used to assess economic and socio-economic impacts of different recycling policies and pathways? Third, an overview of the main findings from currently available economic and socio-economic studies for the following specific waste streams: (i) municipal food/bio-waste and (ii) municipal dry recyclables.



## **REFORM OF THE ENVIRONMENTAL TAX FRAMEWORK OF THE AUTONOMOUS REGION OF ANDALUSIA: CIRCULAR ECONOMY AND WASTE MANAGEMENT**

**Commissioned by Organisation for Economic Cooperation and Development**

Consists of reviewing the existing ecotaxes in Andalusia, assessing their alignment with their goal to improve environmental quality while raising revenue and accounting for distribution concerns, and discussing possible additional tax interventions, with a view to identifying strategic reform options.





### **H2020 SCORE: SMART CONTROL OF THE CLIMATE RESILIENCE IN EUROPEAN COASTAL CITIES**

**Funded by European Commission**

The overarching objective of SCORE is to study, design, develop, monitor and validate robust adaptation measures in coastal and low-lying areas to protect them from increasing climate and sea level risks, including coastal flooding and erosion, thus enhancing their overall long-term resilience.



### **STUDY ON INTERNATIONAL EXPERIENCES WITH USING SPECIFIC CONSUMPTION TAXES FOR CREATING INCENTIVES FOR SUSTAINABLE CONSUMPTION**

**Comissioned by GIZ Deutsche Gesellschaft für internationale Zusammenarbeit**

The report has provided an overview of relevant international policy dialogue and international best practices to green consumption taxes. It has also gathered practical experiences in a range of countries, and analysed the advantages and disadvantages of approaches used thus far.



### **TECHNICAL ASSISTANCE FOR THE DEVELOPMENT OF THE CLIMATE CREDIT MARKET OF THE LIFE CLIMARK PROJECT**

**Comissioned by Departament de Territori i Sostenibilitat**

The main objective is to contribute to climate change mitigation and increase the capacity of Mediterranean forests as carbon sinks, by promoting their multifunctionality and mitigating capacity of forest management with the creation of a climate credits market.



### **H2020 NATURVATION: NATURE-BASED SOLUTIONS**

**Funded by European Commission**

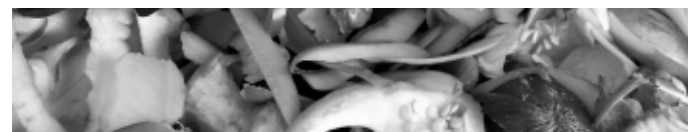
To unlock the potential of nature based solutions for sustainable urban development, NATURVATION takes a transdisciplinary, internationally comparative approach to capture the multiple impacts and values of these solutions, identifying the most promising governance, business, finance and participation models and how to overcome the systemic conditions that currently limit their use.



### **METHODOLOGICAL EXPLORATION FOR THE CALCULATION OF EQUIVALENT RAW MATERIALS IN CATALUNYA**

**Comissioned by Institut d'Estadística de Catalunya**

The purpose of the project is to calculate the equivalent raw materials of commerce in Catalonia, in order to complete the indicators derived from material flow accounts and to have a more precise perspective of the environmental burdens that Catalonia places on other territories, and that other territories place on Catalonia.



### **H2020 DECISIVE: DECENTRALIZED MANAGEMENT SCHEME FOR INNOVATIVE VALORIZATION OF URBAN BIOWASTE**

**Funded by European Commission**

Proposes to change the present urban metabolism for organic matter, energy and biowaste to a more circular economy and to assess the impacts of these changes on the whole waste management cycle. Thus, the challenge will be to shift from an urban "grey box", implying mainly goods importation and extra-urban waste management, to a cooperative organization of networks enabling circular local and decentralised valorisation of biowaste, through energy and bio-products production.



**ANALYSIS OF THE NEEDS OF R+D+I OF NEW MATERIALS FOR PACKAGING AND OF INCREASE OF THE PERCENTAGE OF PLASTIC RECYCLED IN NEW CONTAINERS IN THE FRAME OF THE PROJECT INTERREG EUROPE CIRCE**

Commissioned by Generalitat de Catalunya

The project starts with the analysis of the European regulatory framework in relation to plastics and, in particular, in relation to increase the percentage of recycled plastics in packaging. In addition, it analyses the current waste management system for packaging and the situation of the market in relation to availability of high-quality recycled plastic. It also discusses the implications of increasing the recycled plastic content, in terms of logistics, traceability, etc. The existing and emerging technologies are analysed. From this analysis, R&D needs will be identified and discussed with key stakeholders, which will derive to some conclusions.



**TECHNOLOGICAL PROGRESS AND ENVIRONMENTAL LIMITS: LOOKING FOR SOLUTIONS FOR THE JEVONS PARADOX**

Beatriu de Pinós research grant from Generalitat de Catalunya obtained by Jaume Freire González

The main objective of the proposal was to obtain a better understanding of the Jevons' Paradox and its potential solutions. We investigated how government interventions can minimise the Jevons' Paradox, and where is the limit of it through the case study of Catalonia.

In addition to these projects, we promote our own research projects such as:



**ECOLOGÍA POLÍTICA JOURNAL**

Ecología Política – Cuadernos de Debate Internacional is a bi-annual journal that reflects debates around the influence of political power on socioecological conflicts. Within the discipline of political ecology, it focuses on aspects such as environmental conflicts, inequalities in access to resources and exposure to pollution, environmental policies, resistance networks and social movements and referents of environmental thought.

ENT assumed the secretariat of the journal since 2006. Since 2013, Ecología Política has been jointly published by ENT Foundation and Icaria Editorial, and it counts with an Editorial Board and an Advisory Board.

This year 2021 we reached an agreement for co-editing with the CLACSO Political Ecology Group from 2022 onwards.



**OBSERVATORY ON WASTE TAXATION**

The Observatory on Waste Taxation was created in 2018 to monitor the use of taxation instruments for waste policy in Spain. Our objective is to act as a reference in this aspect and to promote a greater use of waste taxes and charges as tools to improve waste management.



**CONTAMINACIÓ.BARCELONA**

Is a multiplatform communication project that was born in 2019 promoted by the ENT Foundation to provide quality, relevant and easily understandable information on pollution in Barcelona.



**INFOMEDITERRÁNEA.INFO**

It is an initiative born in 2021 promoted by the ENT Foundation that aims to disseminate scientific, technological and social information on the main marine socio-environmental issues in the Spanish Mediterranean.

# 4 FELLOWSHIPS I INTERNSHIPS

## FELLOWSHIPS

In 2021 ENT Foundation had 4 “Fellows”:



### Dr. Santiago Gorostiza

Postdoctoral researcher at the Centre d'Histoire de Sciences Po (Paris), an environmental history specialist in the Spanish Civil War and the Franco regime. He made a research internship at ENT during his doctoral research in the framework of a European Marie Curie project on political ecology. He is a member of the editorial board of *Ecología Política* journal and has edited several issues of the journal. After completing his doctorate at the University of Coimbra (Portugal), he was a postdoctoral researcher at the Institute of Environmental Science and Technology (ICTA) at the UAB, where he did research on environmental history and historical climatology.



### Dra. Irmak Ertör

Assistant professor at the Ataturk Institute - Bogazici University. Economist and specialist researcher in political ecology and specifically in relation to fishing and aquaculture.



### Dr. Gabriel Weber

Associate Professor of International Affairs and Sustainability at ESSCA, Bordeaux. He was a Marie Curie Post Doc Fellow at ENT in the field of Political Ecology. He holds a PhD in Environmental Management and Accounting from TU Dresden in Germany. His research focuses on mitigation and adaptation to climate change, environmental policy instruments, and waste management, within the fields of ecological economics and political ecology.



### Dra. Marien González Hidalgo

Environmental Scientist and researcher specialized in political ecology studies with a feminist perspective and psycho-social perspective in environmental conflicts.

## INTERNSHIPS

In 2021, four internships were carried out at ENT Foundation by:



### Adrià Cusiné

Student of Economics at the University of Barcelona. His main areas of interest are environmental and climate change management policies. He updated the study on the situation of waste charges in Spain by 2021.



### Sergi Chapatte Coromina

Environmentalist specialized in land management and conservation, his main interests are environmental education and communication. She supports the editorial team of the journal *Ecología Política* and the Observatory of Waste Taxation.



### Marc Zea Pallarés

Environmental Sciences student (UB) with a specialization in Environment Management. He works creating an information channel on environmental problems in the Spanish Mediterranean.



# 5 OTHER RESEARCH ACTIVITIES

## CONTRIBUTIONS IN INTERNATIONAL EVENTS

- 🗣️ Puig, I. "The Concept of Generalised Extended Producer Responsibility (GEPR)" | European Platform on Municipal Solid Waste Regulation & Governance | Florence School of Regulation - Online | 16 November.
- 🗣️ Ortega, M., Coll, M. "New FRA Proposal in the Ebro Delta (GSA 06)" | Scientific Advisory Committee on Fisheries. Subregional Committee for the Western Mediterranean. General Fisheries Commission for the Mediterranean. 17-19 February.
- 🗣️ Nogué, B., Ortega, M. Kallis, G. "Seeking Limits to Overfishing in the Mediterranean. A Co-managed Pursuit of Socio-Ecological Wellbeing in Catalan Fisheries". A "Widening the discussions on Blue Degrowth: Actors, Spaces and Alliances" XI MARE People and the Sea Conference. 28 June-2 July.

## COLLABORATION AGREEMENTS

- 🤝 **Universitat de Barcelona**  
(Departament d'Història Econòmica, Institucions, Política i Economia Mundial de la Facultat d'Economia i Empresa)  
Until 2023 to promote research activity, transmission and transfer of knowledge and training support in the areas of ecological economics and political ecology.
- 🤝 **Universitat Autònoma de Barcelona**  
(Institut de Ciència i Tecnologia Ambiental)  
Until 2023, by which the member of the ENT Foundation, Miquel Ortega, becomes a "University Linked Researcher" of the Ecological Economy Research Group at ICTA-UAB.

---

**ENT**

C/ Josep Llanza, 1-7, 2n 3a  
08800 Vilanova i la Geltrú  
+34 93 893 51 04  
[info@ent.cat](mailto:info@ent.cat) | [www.ent.cat](http://www.ent.cat)



@ENTmediambient



ENTmediambient



ENT Environment & Management



ENT environment & management

