# ILONA DIELEN

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#### MAIN RESEARCH FIELDS

Environmental and Urban Economics, Transport Industry, Workers Mobility, Air Pollution

#### **EDUCATION**

# Ph.D in Environmental Economics (3<sup>rd</sup> year)

Since Oct. 2021

GREDEG, CNRS - Université Côte d'Azur

Title: New Mobility Challenges: Essays in Environmental Economics

Abstract: Mobility is an essential concept to societal evolution, presenting opportunities and challenges. It has reshaped the global economy and lifestyles through the movement of goods and people, now closely linked to climate concerns and sustainability. This thesis explores mobility through environmental and regional economics, focusing on newly observed behaviors impacting sustainable development goals through three articles. The first addresses anti-competitive practices in transport industries affecting implementation of emission reduction technologies. The second examines residential mobility influenced by remote work in green cities, exploring a possible environmental gentrification. The third analyzes the spatial redistribution of pollution due to changed commuting patterns in urban areas since COVID-19 pandemic.

Supervisors: Christophe Charlier et Catherine Laffineur

Doctoral grant: IDEX UCAJedi, EUR ELMI

#### Master Degree in Economics and Data Analysis

2021

EUR ELMI - Université Côte d'Azur

Research internship (6 months) granted by MSHS Sud-Est, subject - Sustainable Development Goals' Architecture: A Network Modeling

Master 2 Thesis - Environmental Damage in Competition Policy: The Case of the European Truck Cartel

Master 1 Thesis - The Impact of Wild Fires: Hedonic Pricing of Housing on the French South Coast

# Bachelor Degree in Applied Mathematics

2019

Portail Sciences et Technologie - Université Côte d'Azur

### ARTICLES

#### **Advanced Papers**:

(1) A Green Switch in Time Saves Nines: Assessing the Environmental Damage of the European Truck Cartel - Joint with Patrice Bougette and Christophe Charlier

Environmental regulation intersects with competitive practices, bearing significant implications for both the environment and human health. This study examines a cartel's role in delaying environmental standard compliance in commercial vehicles, thereby exacerbating emissions. Our two-part analysis first estimates the excess pollution attributable to the truck manufacturers' cartel. Findings indicate substantial excess emissions, including 5.9 megatonnes of NOx and 1.1 megatonnes of CO, along with 119

and 239 thousand tonnes for PM2.5 and HC, respectively. Second, leveraging a panel data analysis across 236 NUTS 2 regions over 21 years, we isolate the link between PM2.5 levels and infant health, aiming to quantify the effects attributable to the cartel's actions. The results indicate a significant impact, with an estimated range of 234 to 342 thousands days of hospitalizations for respiratory causes that could be avoided.

(2) Green is the New Black? The Role of Remote Work on Residential choice since COVID-19 - Joint with Catherine Laffineur

Does the migration of remote workers become a challenge to the sustainability of cities? Between 2019 and 2021, real estate prices in cities with greater tree cover (green cities) increase by an average of 9%, compared to only 3% in non-green cities. Remote working has expanded the traditional criteria for workers' location choices, with environmental quality and its accessibility becoming important factors. This study analyzes the impacts of remote work on the French real estate market in the post Covid era, focusing on how natural amenities influence city selection. Using unique data on cities' green coverage and remote work, the study's findings confirm the theoretical predictions that post-pandemic remote workers choose greener locations when they relocate. Our analysis subsequently reveals a significant influence of remote worker migration on house price growth in cities offering natural amenities. This trend is mainly attributed to skilled workers relocating to areas with higher environmental quality. We conclude that work-from-home (WFH) exerts upward pressure on housing prices in greener cities, which is symptomatic of an environmental gentrification of these cities, making them less affordable for non-remote workers and thus supporting a double inequality.

## Preliminary Papers:

(3) Inequality in Exposure to Air Pollution in France: Is WFH an opportunity?

This article investigates the evolving patterns of inequality in exposure to air pollution since the onset of the Work From Home (WFH) era. The WFH movement, largely propelled by the COVID-19 pandemic, has significantly altered urban dynamics and commuting patterns, potentially impacting environmental inequalities. Our research focuses on whether these changes have led to a convergence or divergence in the exposure to air pollution across different socio-economic groups. Utilizing a combination of environmental data and socio-economic indicators, we conduct an analysis across several urban areas. The findings present a nuanced view: in some regions, the reduction in commuting has led to a convergence in pollution exposure levels, while in others, existing inequalities have deepened, indicating a divergence. This study contributes to the understanding of environmental justice in the context of changing work patterns, highlighting the need for targeted policies to address these emerging disparities in the WFH era.

(4) Seeing Green: The Impact of Visibility on Environmental Norm Adoption in Social Networks - Joint with Mathieu Chevrier and Arnaud Persenda

While green attitudes are considered costly to adopt and maintain, we observe an increase in the number of people choosing to adopt them. However, we also notice that some people choose not to adopt these green attitudes. In this article, we study how green attitudes (such as bike commuting, local sourcing, vegetarianism, etc.) spread through a social network in a context where no central authorities enforce them. We model these attitudes as competing norms: one costly, the green attitude, and one cost-free, the non-green attitude. We build a contagion model in a network setting that allows for the existence of clusters of nodes in which non-green attitudes dominate. A behavioral economics lab experiment will be conducted to quantify the network effect of the model.

# TEACHING EXPERIENCE

Teaching Assistant, Econometrics Portail Économie-Gestion, Université Côte d'Azur	$Nice,\ France$ $2021-24$
Tutorials, 137 hours, 350 students.	
Khôlleuse, Microeconomics CPGE Droit-Économie, Institut Stanislas	Nice, France 2023-24
Khôlles <sup>1</sup> , 11 hours, 30 students.	
Teaching Assistant, Econometrics Prépa intégrée ESDHEM, SKEMA Business School	Sophia-Antipolis, France
Lecture and tutorials, 30 hours, 40 students.	
COMMUNICATIONS	
29 <sup>th</sup> EAERE annual conference, 2-4 July, Leuven, Belgium	202
72 <sup>th</sup> AFSE Annual Conference, 17-19 June, Bordeaux, France	202
40 <sup>ème</sup> Journée de la Microéconomie Appliquée, 6-7 June, Lille, France	202
8 <sup>th</sup> AFED annual conference, Nice, France	202
10 <sup>th</sup> FAERE annual conference, Montpellier, France	202
62 <sup>nd</sup> ERSA Congress, Alicante, Spain	202
28 <sup>th</sup> EAERE annual conference, Limassol, Cyprus	202
Workshops, thematic schools and seminar :	
CCorse team's seminar, $GREDEG$ , $Sophia-Antipolis$	202
4 <sup>th</sup> GREDEG Ph.D Workshop, GREDEG, Sophia-Antipolis	202
Doctoriales thematic day, Post-graduated school DESPEG, Nice	202
Environmental Ph.D Seminar, GREDEG, Sophia-Antipolis	202
"Commons studies" Thematic School, MMSHS, Aix-En-Provence	202
2 <sup>nd</sup> GREDEG Ph.D Workshop, GREDEG, Sophia-Antipolis	202
CTIVITIES	
Academic Event Organisation	200
Environmental Ph.D Days, Workshop Doctoral, sept.	202
Doctoriales thematic day, ED DESPEG 513, 31 may	202
8 <sup>th</sup> AFED annual conference, 19-20 oct.	202
Doctoriales thematic day, <i>ED DESPEG 513</i> , 31 may 3 <sup>rd</sup> GREDEG Ph.D Workshop, 20-21 jan	202 202
Academic and Associative Engagement	
PhD students' delegate on the doctoral school Council, DESPEG	2023-2
Vice President in the Young Researcher Association of Alpes-Maritimes, A	AJC06 202
President of the Economics Master Association, QUALIS'S	2020-2
Academic Report	
Impact assessment of the "Cordées de la réussite" program on the develop	oment of high school st
1 4 1 1 NT	000

Oral examination of the economic program (bachelor's level) for students preparing their entrance exam to universities of higher education.

2021

dents' career plans, Académie de Nice

### **COMPLEMENTS**

Languages: French, English

Computer Languages: STATA, R, SAS, QGIS, Excel, MS Office, LATEX

# ACADEMICS REFERENCES

Patrice Bougette GREDEG, CNRS Université Côte d'Azur 250 rue Albert Einstein 06902, Valbonne, France patrice.bougette@univ-cotedazur.fr

Christophe Charlier MSHS Sud-Est GREDEG, CNRS Université Côte d'Azur Avenue Valrose 06000 Nice, France

Université Côte d'Azur 250 rue Albert Einstein 06902, Valbonne, France

Catherine Laffineur

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