

## Position Description

### 1. General Information

Name of the position	<b>The dynamics of green finance under uncertainties: Implications for sustainable development</b>
Foreseen enrolment date	September 2025
Position is funded by	<ul style="list-style-type: none"> <li>• COFUND, Marie Skłodowska-Curie Actions (MSCA), Horizon Europe, European Union</li> <li>• University of Vaasa</li> <li>• RMIT University</li> </ul>
Research Host	University of Vaasa
PhD awarding institutions	University of Vaasa & RMIT University
Locations	Primary: Vaasa, Finland Secondary: Melbourne, Australia
Salary	30,605.12 EUR annual <b>gross</b> salary (2,448.41 EUR monthly gross salary)
Supervisors	<ul style="list-style-type: none"> <li>• Anupam Dutta, Assoc. Prof., University of Vaasa</li> <li>• Vanja Piljak, Assoc. Prof., University of Vaasa</li> <li>• Di Mo, Senior Lecturer, RMIT University</li> <li>• Tarek Rana, Associate Professor, RMIT University</li> </ul>
Group of discipline	Green Finance, Sustainable Development

### 2. Research topics (only one of these projects will be funded)

<b>Project 1: Geopolitical risk and hydrogen financing</b>
Hydrogen financing, an investment strategy to achieve carbon neutrality, has received enormous attention from eco-friendly investors in recent years. Investments in green hydrogen provide environmental benefits that could ensure global sustainability by reducing the use of fossil fuels and improving air quality. Besides, hydrogen financing is also important for launching eco-friendly products or services and thereby reducing the adverse impact of climate change. However, while hydrogen investing plays a crucial role in attaining carbon neutrality, various uncertainties such as geopolitical risk and thereby rising oil price volatility tend to make the deployment of hydrogen technologies rather sluggish. This empirical research aims to hedge the downside risk of hydrogen portfolio when the geopolitical risk is relatively high.
<b>Supervisors:</b> Anupam Dutta (UVA), Vanja Piljak (UVA), Di Mo (RMIT), Tarek Rana (RMIT)
<b>Research Fields:</b> Carbon Neutrality, Sustainability, Finance



### Project 2: *Volatility dynamics of clean water investments*

The rising demand for clean water leads to a significant increase in investments for water technologies. Given that innovations in water technologies play a pivotal role in combating global clean water crisis, socially responsible investors seem eager to invest more in clean water for the transition to a sustainable society. However, water investing has received much attention among the investors only in recent years and hence water-related assets could be highly volatile in nature. To this end, the aim of this project is to study the volatility dynamics of water equities for diversification, hedging effectiveness, and asset allocation purposes. This strand of research offers key implications which could be crucial for reaching the net-zero goals.

**Supervisors:** Anupam Dutta (UVA), Vanja Piljak (UVA), Di Mo (RMIT), Tarek Rana (RMIT)

**Research Fields:** Finance, Water Technology, Net-Zero

### Project 3: *Time-varying connectedness between global carbon markets*

Global climate change, which is largely attributable to greenhouse gas (GHG) emission from fossil fuel consumption, requires a fundamental transition from non-renewable to renewable energy sources. However, the rising uncertainty due to COVID-19 pandemic and the Russo-Ukrainian war leads to a significant delay in global renewable energy promotion. To this end, the carbon emission trading system (ETS) could play a pivotal role in energy transition towards carbon neutrality. Given that the ETS in developing markets (e.g., Chinese emission market) is less mature than the developed markets (e.g., the EU-ETS) because of low carbon prices and poor liquidity, it is crucial to understand the interaction between the international carbon markets to ensure the steady development of the carbon finance business. As the effects of climate change are global, proper knowledge on such linkage is essential for developing a unified and efficient trading system to reduce GHG emissions.

**Supervisors:** Anupam Dutta (UVA), Vanja Piljak (UVA), Di Mo (RMIT), Tarek Rana (RMIT)

**Research Fields:** Renewable Energy, Climate Change, Finance

## 3. Employment Benefits and Conditions

The University of Vaasa offers maximum a 48-month full-time work contract. A probation period of maximum 6 months can be applied, and the annual workload for researchers is 1,612 hours / year.

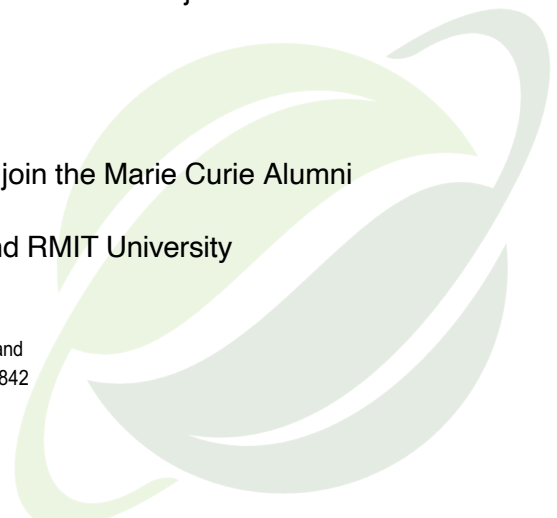
The remuneration, in line with the European Commission rules for Marie Skłodowska-Curie grant holders, will consist of a **gross annual salary** of yearly 30,605.12 EUR (monthly 2,448.41 EUR gross). Of this amount, the estimated net salary to be perceived by the Researcher is 1,958.728 EUR per month. However, the definite amount to be received by the Researcher is subject to national tax legislation.

### Benefits include

- Becoming a Marie Skłodowska-Curie fellow and be invited to join the Marie Curie Alumni Association
- Access to all the necessary facilities at University of Vaasa and RMIT University



This project has received funding from the European Union's Horizon Europe research and innovation programme under the Marie Skłodowska-Curie grant agreement N° 101179842



- Tuition fees exemption at both PhD awarding institutions
- Travel allowance to cover flights and accommodation for participating in DREAM+PLAN events
- Up to 12 months in Australia
- 30 days paid holiday leave
- Social security coverage
- Sick leave
- Parental leave

## 4. PhD enrolment

Successful candidates for this position will be enrolled by the following institutions and must comply with their specific entry requirements, in addition to DREAM+PLAN's conditions.

### University of Vaasa

To enrol in a Doctorate program you must meet the general conditions, which can be found through this link: [Admissions to doctoral studies | University of Vaasa](#).

### RMIT University

Visit the website: <https://www.rmit.edu.au/research/research-degrees/how-to-apply>

