# Maryam SADIGHI, PhD

## **Energy Engineer & Economist**



Maryam.sadighi94@gmail.com

in /in/maryam-sadighi/

+33 (0) 755641127

Île-de-France

# Summary

Expert in the energy and environment sector, backgrounds in engineering, economics, and management. Skilled in research, strategy development, and energy system modeling, with a strong interest in public policy and sustainable innovation. Passionate about learning and growth, I seek opportunities to apply my expertise to support energy transition.

## **Digital Skills**

- Microsoft Office Excel, Word, PowerPoint
- **Python** Data analysis, modeling, optimization
- -MATLAB Energy system simulation
- LaTeX Scientific writing and documentation

# **Technical & Analytical Skills**

- Energy system modeling
- Dynamic optimization & numerical simulation
- Cost-benefit analysis & scenario analysis
- Public policy simulation & economic assessment

#### Soft Skills

- -Adaptability and Flexibility
- Analytical Thinking and Problem-solving
- Project Management
- Communication, Teamwork, & Interpersonal skills

### Languages

English: Full Proficiency

French: Limited Proficiency

- Persian: Native

#### References

- Jan MERTENS, Chief Science Officer at ENGIE
- Elodie LE CADRE, Director of the Recycling Business Unit at Veolia
- Maria-Eugenia SANIN, Associate Professor at Université Paris-Saclay
- <u>Jean-Pierre PONSSARD</u>, Emeritus Research Director at CNRS

## **Experience**

- Research Project Lead | July 2021-June 2025 ENGIE Research and Innovation (R&I), ENGIE SA, France
  - Investigating techno-economic viability of clean hydrogen technologies for industrial energy transition: Analyzing data, interpreting results, and generating insights to inform strategic decision-making and policy development.
  - Contributing to research reports, publications, and presentations for academic and industry audiences.
- Associate Researcher | July 2021-July 2025

Chair Energy Prosperity of École Polytechnique, La Fondation du Risque, France

- Conducting Cost-Benefit Analysis of the Industrial Energy Transition
- Energy Analyst: R&D Intern | Apr-Sep 2020

EDF R&D Lab Les Renardières, France

- Techno-Economic modeling of photovoltaic production and selfconsumption in the tertiary sector
- Product Control Systems Engineer: R&D Intern | Jun-Sep 2017

Zagross Co, Iran

- Developed and implemented product control systems to optimize manufacturing processes for commercial refrigerators and freezers.
- Aircraft Engineer: R&D Intern | Jun-Sep 2016

IRAN Air, Iran

 Participated in practical training on aircraft general familiarization, gaining hands-on experience with various aircraft systems and components and troubleshooting exercises

### **Education**

- University of Paris-Saclay, Paris, France | Nov 2021- June 2025
  Ph.D. in Energy Economics
- EIT InnoEnergy Master School | Aug 2018- Sep 2020
  Double Degree MSc. in Renewable Energy (RENE)
  (Awarded full scholarship by KIC InnoEnergy)
- École Polytechnique, Paris, France | Sep 2019- Sep 2020 M.Sc. in The Energy Environment: Science Technology and Management (STEEM)
- KTH Royal Institute of Technology, Stockholm, Sweden | Sep 2018- June 2019 M.Sc. in Energy Innovation
- ESADE Business & Law School, Barcelona, Spain | Sep 2018- July 2019
  Entrepreneurship and Strategic Innovation Course
- University of Tehran, Tehran, Iran. | Sep 2012- July 2017
  B.Sc. in Mechanical Engineering

### Conferences

- Presentation of the Paper: "Green Hydrogen and Green Growth -Evaluating the Macroeconomic Impacts of Energy Transitions in SOEs"
- 46th IAEE International Conference, Paris | June 2025
  - Presentation of the Paper: "A Merit-Order for End-Uses of Hydrogen"
- 29th EAERE Annual Conference, Leuven | July 2024
- 18th IAEE European Conference, Milan | July 2023
  - Presentation of the Paper: "Cost-Benefit Analysis of Clean Technology
    Demonstrators: Insights for Decarbonizing Hard-to-Abate Industries"
- **SESTEF** International Conference, Paris | December 2022
- INRAE International Conference, Paris | May 2022
- 43rd IAEE International Conference, Tokyo | July 2022

## **Patent**

**An air-conditioned motorcycle helmet using solar system,** Iran Intellectual Property Office (registration number: 94283) | July 2017