



TITLE: The impact of a nuclear power plant on its surroundings in the social, economic, and environmental context.

LAB & PEOPLE

- Name of the hosting lab: Department of Investment and Real Estate
- General activities of the lab: Department of Investments and Real Estate is formed by academic and research staff members, whose main goal is to carry out research and share knowledge in the following areas:
 - preparation and assessment of investment projects' profitability,
 - capital and money market,
 - financial investments
 - financing of investments,
 - investment in real estate markets,
 - investment in non-material values,
 - investment strategies of enterprises,
 - real estate management,
 - the commercialisation of real estate,
 - valuation of real estate and enterprises,
 - real estate trade agencies,
 - real estate market analysis,
 - risk management,
 - innovation investment,
 - city development.
- Website: https://wzr.ug.edu.pl/inwestycje/
- Number of staff / Ph.D.: 9/7
- Supervisor name and contact: Assoc. Prof. Anna Wojewnik-Filipkowska Anna <u>anna.wojewnik-filipkowska@ug.edu.pl</u>, Ph.D. Aleksandra Koszarek-Cyra <u>aleksandra.koszarek-cyra@ug.edu.pl</u>

TOPIC OF THE INTERNSHIP

Scientific context of the internship (max 20 lines): Large infrastructural investments, such as nuclear power plants, have a significant impact on their closer and further surroundings. It can have both positive and negative overtones, it is often not limited to the energy sector and entails many effects that are not obvious at first glance. Identification of the effects of the investment process related to the construction and operation of a nuclear power plant throughout the project life cycle- from the planning stage, through the explantation stage, to the end of the plant's operation, is one of the key issues during the preparation of such an investment. The effects can be attributed to three main areas - economic, environmental, and social. The issues analyzed in

our research include, among others, changes in real estate prices related to the construction of the power plant, impact of the power plant on tourism in the area surrounding the facility, impact on employment/unemployment, social participation, social conflicts, energy security and development of accompanying infrastructure.

Keywords: nuclear power plant, external effects, infrastructural investments

Bibliography :

- Nuclear Energy Agency Organisation For Economic Co-Operation And Development (2003) Nuclear Electricity Generation: What Are the External Costs?, OECD, ISBN 92-64-02153-1
- Nuclear Energy Agency Organisation For Economic Co-Operation And Development (2007) Risks and Benefits of Nuclear Energy, OECD
- International Atomic Energy Agency (2003) Consideration of External Events in the Design of Nuclear Facilities Other Than Nuclear Power Plants, with Emphasis on Earthquakes, IAEA-TECDOC-1347, IAEA, Vienna
- Ramana M.V. (2009) Nuclear Power: Economic, Safety, Health, and Environmental Issues of Near-Term Technologies. Annual Review of Environment and Resources, vol. 34. 10.1146/annurev.environ.033108.092057.
- Gamble H., Downing R. (2006) *Effects of Nuclear Power Plants on Residential Property Values.* Journal of Regional Science, vol. 22, pp. 457 - 478. 10.1111/j.1467-9787.1982.tb00770.x.
- Kessler G., Veser A., Schlueter F., Raskob W., Landman C., Päsler-Sauer J. (2014) *The Risks* of Nuclear Energy Technology. 10.1007/978-3-642-55116-1.
- Tasks and duties entrusted to the student:

The intern's task will be to identify the effects of the investment process related to the construction and operation of a nuclear power plant throughout the project's life cycle, i.e. from the planning stage, through operation, to the end of the plant's operation (if it has already occurred). Based on the literature on the subject, available documents, information available on investors' websites, and industry services, the student will prepare an analysis of the effects and potential risks associated with the construction and operation of a chosen nuclear power plant.

- Skills to be acquired or developed:
 - analytical and research skills
 - written and oral communication,
 - the critical approach to the subject of study
 - ability to plan, organise and prioritise work
 - paying attention to detail

PROFILE OF THE DESIRED STUDENT

- Minimum level of study required: Master 1
- Field(s) of study: Social sciences, management, urban planning
- Scientific skills: writing and analysis skills, scientific curiosity for the subject matter
- Language skills required: English level B2

THE INTERNSHIP ASSIGNMENT:

Desired duration of the internship (in months): 2 months Desired Starting date of the mission: January/April 2024 Indicative weekly schedule: *20 h / week* The Intern can apply for Erasmus grant from home university Remuneration: 0 €/month Internship agreement: *an internship agreement will be signed*.

To SEA-EU students:

If you're interested please send your CV and letter of motivation to the scientist in charge, email: anna.wojewnik-filipkowska@ug.edu.pl or aleksandra.koszarek-cyra@ug.edu.pl before 30/11/2023