



Politechnika Krakowska
im. Tadeusza Kościuszki

FACULTY: ENVIRONMENTAL ENGINEERING

COURSE TITLE: ENVIRONMENTAL DECISION-MAKING

Institute/Division: Institute of Water Supply and Environmental Protection, Chair of Water Supply, Sewerage and Environmental Monitoring

Number of contact hours: 30 (Lectures, exercises)

Course duration: 1 semester (SPRING)

ECTS credits: 2

Course description: *The main purpose of the course is to give a general knowledge on tools available for incorporating environmental costs and considerations into decision making in industry and in designing, operating and managing municipal water enterprises. The lectures will cover the following topics: tools for decisions screening, categories of environmental impact, qualitative and quantitative information, spread, assessment and pedigree of available environmental data, methods of cost estimation, generation of financial indicators, Life Cycle Assessment as a tool for improving environmental impact of goods, stages of a product life, economical tools in efficient distribution of investments for protection of environment, comparing different products in respect to their environmental impact, idea of a stack market for pollution, simple elements of optimization methods applied to environmental decision making, most current trends in municipal utilities designing methods reducing the impact of urbanization of floods and urban water quality, Environmental liabilities such as compliance, remediation obligations, fines and penalties, compensations, and payment for natural resource damages*

Literature: Ciechanowski P., Dąbrowski W., Environmental product Declaration – practical implementation of ISO1402 Technical Report 1st International Conference on Cycle Management, Copenhagen, Sierpień 27-29,2001, 141-144 Helby P., EKO-Energi – a public voluntary programme targeted at Swedish firms with ambitious environmental goals, Journal of Cleaner Production, 2002,10,129-141 Rettergen M.G., Farla J.C.M., Blok K.,



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Do agreements enhance energy efficiency improvement? Analysing the actual outcome of long – term agreements on industrial energy efficiencies improvement in the Netherlands, ibid. 10,2001,153-163

Assessment method: Exercises, final conversation

Primary target group: 2nd year students in Environmental Engineering programme, BSc(Undergraduate

Lecturer: Wojciech Dąbrowski, Professor

Contact person: Michal Zielina, Ph.D.(Eng.) , phone #: +48 12 628-28-36; e-mail: mziel@vistula.wis.pk.edu.pl

Deadline for application: 1st February 2016