

ENV 501 / GR A3 30

Material Flow Analysis and resource management

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Fall 2024



- Current** **Full Professor for Human-Environment Relations in Urban Systems (HERUS)**, EPFL, since March 2016
Dean School of Architecture, Civil & Environmental Engineering (ENAC), EPFL, 2020-2023
- Positions held** **Assistant Professor for Social and Industrial Ecology**, Institute for Geography, University of Zurich, 2006-2009
Full Professor for Systems Sciences, University of Graz, Austria, 2009-2011
Full Professor for Human-Environment Relations, Department of Geography, University of Munich, 2011-2016
- Habilitation** **ETHZ Venia legendi Human-Environment Systems, 2006**
Concept and models on material stocks and flows in human-environment systems:
A contribution to transitions towards sustainable development
- Post-doc** **University of Maryland, USA**
Ecological Economics / Agricultural and resource economics
- PhD** **ETH Zürich, 1996**
The early recognition of environmental impacts of human activities in developing countries

Dr. Francisco Xavier Félix Martín del Campo



- Current** **Postdoctoral Researcher, Laboratory on Human-Environment Relations in Urban Systems (HERUS), EPFL, since October 2023**
Socio-metabolic research
Material flows & stocks analysis
Built environment
Circular economy
- PhD** **“Sustainability Management”, University of Waterloo, Canada, School of Environment, Enterprise and Development (SEED), Industrial Ecology Group, 2018 – 2023**
Resource-use dynamics
Socio-metabolic risks
Sustainability & resilience to climate change
- Private sector** **Construction & engineering sector**
Corporate Social Responsibility / resources optimization
Renewable energy / energy savings
Energy management system for the construction sector



- Current** **Postdoctoral Researcher, Laboratory on Human-Environment Relations in Urban Systems (HERUS)**
Socio-technical energy transitions
Diffusion and adoption of renewable energy technologies
- Private sector** **Regional manager in energy model region, Austria, 2016-2018. Project manager and researcher in energy agency, Austria, 2018 - 2020**
Project management in the field of renewable energy technologies and sustainable mobility
- PhD** **University of Graz, Institute of Systems Sciences, Innovation and Sustainability Research, 2011 - 2016**
Managing sustainable energy transitions: A socio-technical perspective on regional energy initiatives and innovations in the building sector



- Current** **PhD student, Laboratory on Human-Environment Relations in Urban Systems (HERUS)**
Governance of energy transitions
- Research project** **Enabling Decentralized renewable Generation in the Swiss cities, midlands, and the Alps (EDGE)**
Socio-technical transition pathways
- Master** **Eindhoven University of Technology, 2022**
Sustainable Energy Technology
Maastricht University & UNU MERIT, 2022
Public Policy & Human Development

Student projects

We are always seeking highly motivated and engaged students to work on **master and semester projects**.



HERUS
Website

Open student projects

Analyzing the influence of environmental assessment methods on transition policies in the Lake Geneva region

Type: Master or semester project

Starting date: September 2024 – January 2025

Supervisors: Matthias Heinrich, Claudia Binder

Towards an automated, real-time analysis of parliamentary debates

Type: Master or semester project

Starting date: Between June and September 2024

Supervisors: Simon Montfort, Claudia Binder

A data-driven typology of energy transition potential in Switzerland

Type: Master or semester project

Starting date: Between June and September 2024

Supervisors: Simon Montfort, Claudia Binder

Trade-offs between renewable energies and biodiversity

Type: Master project

Starting date: Between June and September 2024

Supervisors: Leila Schuh (WSL), Ueli Reber (Eawag), Gerold Schneider (UZH)

An aerial photograph of a desert landscape. A light-colored, winding road or path cuts through the terrain. The landscape is characterized by light-colored, sandy soil and scattered dark, rocky outcrops. Some sparse, low-lying green vegetation is visible in the lower-left quadrant. The overall scene suggests a remote, arid environment.

Thank you for your attention!