

The Research Group
Cosmopolis

has the honor to invite you to the public defense of the PhD thesis of

Griet Juwet

to obtain the degree of Doctor of Sciences

Title of the PhD thesis:
Energy transition as a catalyst for spatial and sociopolitical transformation. Exploring the role of planning and design in the dispersed urban context of Flanders

Promotor:

Prof. dr. Michael Ryckewaert (VUB)
Prof. dr. Fabio Vanin (VUB)

The defense will take place on
Tuesday, June 14, 2022 at 15h in auditorium D.2.01

Members of the jury

Prof. dr. Nele Aernouts (VUB, chair)
Dr. Dieter Bruggeman (VUB, secretary)
Prof. dr. Cathy Macharis (VUB)
Prof. dr. Chiara Cavalieri (UC Louvain)
Dr. Jonathan Rutherford (Paris Est University)
Prof. dr. Anneleen Kenis (Ghent University)

Curriculum vitae

Griet Juwet is an urban designer and researcher. After an Msc in Engineering-architecture (Ugent, 2012) and a postgraduate degree in Urbanism and Strategic Planning (KULeuven, 2014), she practiced in an urban design office and started as teaching assistant and doctoral researcher at VUB in 2016. Her research explores the role of spatial professionals in transitions towards sustainable and more inclusive urban environments. She presented her work at academic conferences in Belgium and abroad and published in both popular-scientific and internationally peer-reviewed journals.

Abstract of the PhD research

Flanders' dispersed urbanization patterns were facilitated and reproduced by ubiquitous and isotropic networks for electricity and gas distribution. Today this energy-intensive landscape is running into its spatial, ecological and societal limits. Meanwhile, the transition to more sustainable energy systems introduces potentially transformative logics, as energy configurations and governance models become more spatially selective and diverse. Proximity between source and demand, density and function mix become relevant again, while individual energy consumership and centralized governance can be replaced with more collective energy arrangements. In this research I use Flanders' particular territorial context to investigate this spatially and socio-politically transformative potential of energy transitions. I explore how spatial planning and design can contribute to energy transitions that activate more qualitative spatial development and more inclusive forms of energy governance.

Drawing from transition theory, urban metabolism studies, and planning and design literature, I propose a conceptual framework to describe the relations between energy system transformation, territorial morphology and energy governance. Three empirical chapters illustrate how the spatial and political implications of energy transitions play out on different scales and in different energy domains. They are based on a combination of qualitative and designerly research methods, including spatial mapping and scenario workshops, in-depth interviews, document analysis and participant observation.

I conclude that planning and design have a key role to play, to imagine, visualize and facilitate collective energy strategies, that connect technical energy solutions with other territorial and societal challenges. At the same time, I expose how a serious governance deficit at the Flemish level hinders the implementation of promising transformative energy strategies at the scale of neighbourhoods and supra-local regions.