## Flowing in circles

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In our contribution to the conference we focus on the energy transition as it is happening right now in the Northern Netherlands. A new group of businesses has emerged and is growing rapidly: Decentralized Energy Businesses, presenting a clear alternative to the more established larger energy companies in the Netherlands and in Europe. These businesses as well as the communities to which they are linked focus only on renewable energy and sustainable solutions that suit their local or regional needs and capabilities.

To describe this emerging reality we are using the model of the Circular Economy as outlined by the Ellen MacArthur Foundation as well as the Cradle to Cradle principles. Rather than emphasizing products and production we have adapted the model to focus on flows (such as energy, water, biomaterials and waste).

Our research group at the Hanze University of Applied Sciences closely collaborates with a network of two groups of Small and Medium-sized Enterprises (SMEs), which are (1) the Decentralized Energy Businesses and (2) the local companies supplying technological products, installation and other services and consultancy. As part of our approach SMEs play active roles in the research itself. Besides businesses, various governmental organizations and representative/advocacy organizations are also closely involved.

This conference paper aims to explain how our curriculum development is informed by these SME business practices and applied research concerning the application of the model of Circular Economy to the energy transition that is currently unfolding in the Northern Netherlands. We will discuss the outlines of a new course on Innovation Management including opportunities for an international project (with MAMK Finland) concerning Circular Economy (part of the bachelor of Business Management). We will also discuss a project around Energy Transition for 2<sup>nd</sup> year Master students of Architecture. Thirdly, we have been working with junior researchers & students in individual graduation research projects. At the conference, we would like to share our experiences as well as learning form others in the session workshop.