

Enabling sustainable bioeconomy transition through engaging with civil society

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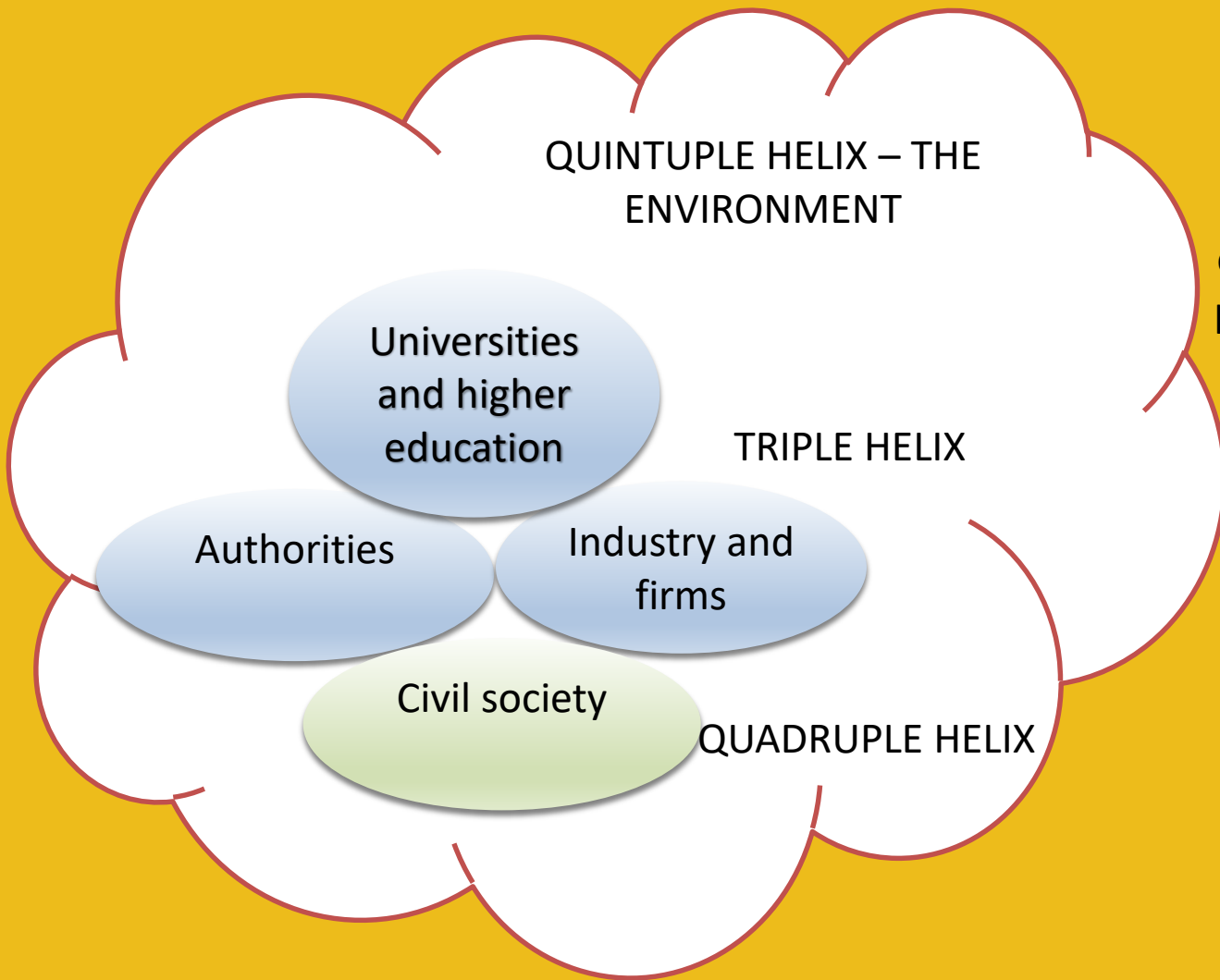
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Regional innovation systems in short



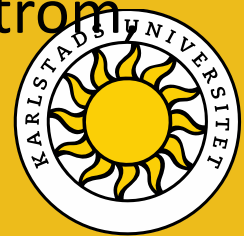
Infrastructure of different actors supporting knowledge exchange and development to promote innovation in a broad sense of the word.

Can be harnessed to address societal challenges.



From triple to quadruple helix

- Quadruple helix innovation system adding a fourth helix and democratising the innovation system (Caryannis and Campbell, 2009)
- Quadruple helix a way to broader access to governmental and academic resources and for environmental and social organisations to gain influence in policy making (Lindberg et al, 2012; Hock Heng et al, 2012)
- To be able to meet grand challenges and green transformation new collaborations between actors from different spheres in society, including civil society in innovation processes is needed (Grundel & Dahlström 2016)



Common definitions of civil society within regional innovation systems

Consumer driven innovation

Consumers

Customers

User driven innovation

Users

Social innovations

Arena outside the family, state, academy, industry and firms

Non governmental organisations

Associations and social movements

Growth oriented
innovation policy

Democracy oriented
innovation policy



Grundel (2018) Hur kan vi göra grön omställning tillsammans, CRS Policy brief nr 1 2018

Grundel (forthcoming) Energy transitions from a (RIS)-helix approach

Why we need to make the transition in inclusive collaboration

- The societal challenge of climate change is so complex and truly global that involvement of the entire society is necessary
- Civil society actors are often very knowledgeable but under valued by decision makers.
- Engaging all types of actors in participatory processes as early as possible in decision making processes results in:
 - Co-creation of knowledge and learning
 - Increased trust by all actors in relation to decision making



Energy transition in Overijssel – results from inclusive programme

- Higher ambition and better result than national average (% renewable energy)
- Increased social sustainability – local job creation
- Increased knowledge about ecological sustainability
- Joint learning
- Feeling of shared responsibility



Grundel (2018) Hur kan vi göra grön omställning tillsammans,
CRS Policy brief nr 1 2018

Grundel (forthcoming) Energy transitions from a (RIS)-helix approach

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References

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- Grundel, I. (2018) Hur kan vi göra grön omställning tillsammans?, CRS Policy Brief, 2018:1
- Grundel, I. (forthcoming) Energy transitions from a (RIS)-helix approach
- Grundel, I. & Dahlström, M. (2016) A Quadruple and Qunituple Helix Approach to Regional Innovation Systems in the Transformation to a Forestry-Based Bioeconomy, in *Journal of the Knowledge Economy*, 7, 963-983
- Hock Heng et al. (2012) Fourth pillar in the transformation of production economy to knowledge economy, in *Procedia – Social and Behavioral Sciences*, 40, 530-536
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Other CRS policy briefs of relevance:

- Omställning till bioekonomi, smart specialisering och quadruple helix (2015:1)
- Transition to Bio-Economy, Smart Specialization and Quadruple Helix (2015:1) GB
- Tillsammans ställer vi om med hjälp av skogen (2015:2)
- Sustainable transition towards a forestry-based bioeconomy (2015:2) GB
- Grundel, I. & Berglund, C.: Gränsöverskridande ekosystemtjänster (2017:1)





Thank you!
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