

Optimising FEW-Nexus to support sustainable resource management in cities

SUGI Impact Workshop,
Online, 21 January 2021

SUNEX is

- conducted by 6 partners in 4 cities
- working interdisciplinary
- applying quantitative models
- involving stakeholders
- developing policy guidelines to support city governance



Berlin



Bristol



Doha



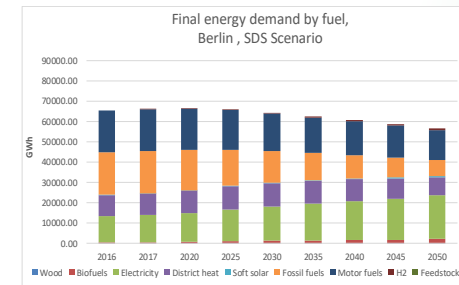
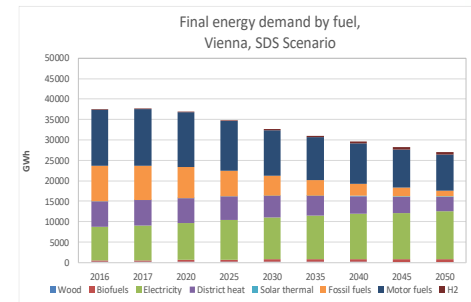
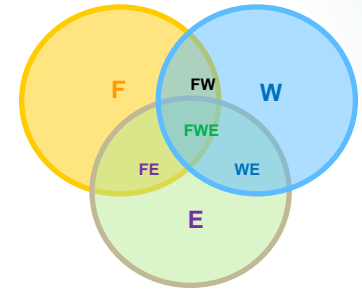
Vienna

Project Results



What are your most promising results so far?

- Applicable FWE demand–supply modelling tool(s)
- Developing long-term sustainable FWE-demand scenarios for the 4 cities and calculation of CO2-emissions
- Establishing the approach of Key Nexus Indicators (KNIs) for FWE-systems in urban contexts
- Exploring existing saving potentials within the nexus and related socio-economic and technological measures for their improvement
- Identification of nexus challenges, innovations and transition pathways for a sustainable urban FWE-nexus
- Policy guidelines to support city governance (ongoing)



Project Impacts



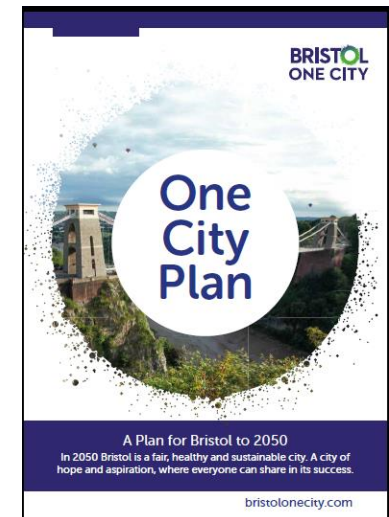
What do you expect to be the 2-3 most important short term and long term impacts from your SUGI project?

Short and mid term:

- Improved understanding for urban FEW-Nexus modelling and the need to advance related city databases
- Appropriate indicators to track future sustainable FWE-strategies (KNIs)

Bristol:

- novel “urban living lab” initiative for the city involving SUNEX partners UWE and Bristol Water, as well as city partners and associated stakeholders
- clear input to both process and substance of the current review of the Bristol One City Plan



What do you expect to be the 2-3 most important short term and long term impacts from your SUGI project?

Long term:

- Provide a modelling framework, indicators and uncertainty assessment for decision making, for optimisation of resource use regarding energy, water, food and finally land consumption
- Long-term relation with city stakeholders to embed urban FWE nexus within future city policies
- Creating awareness about the nexus concept at all and the need for more integrated urban policies (inter-sectorial / nexus thinking)
- Nexus “arrived” in urban (development) planning (e.g. Bristol)

Project Approach



How will you go about to realize these impacts? What is your approach?

- Deployment of the developed and tested easy-to-use demand-supply modelling framework
- Generating appropriate set of indicators to track future sustainable pattern of FWE-strategies
- Co-creation process with city stakeholders to develop visions and scenarios for sustainable FWE-strategies
- Developing policy guidelines based on scenarios and in interaction with cities' stakeholders and decision makers
- Linking between SUNEX project objectives and outputs with ongoing policy and planning processes (smart or carbon neutral cities...)
- Stakeholder engagement approach impactful for the Bristol City planning process and at the same time provided a rich resource of understanding investing the SUNEX policy guidelines specification

Networking and Capacity Building



What support in terms of collaboration with other SUGI projects and dedicated activities from the SUGI implementation team do you need to realize these impacts?

- Aligning SUGI projects effort to establishing city's database on FWE-systems and related socio-economic and technological drivers to enable analyzing FWE-Nexus ...
- (financial) support for dissemination events (e. g. science-policy dialogues) of different SUGI projects at case study level could create synergies and increase impact
- Collaboration / exchange on linking FWE nexus with UN-SDG's (global and local scale)