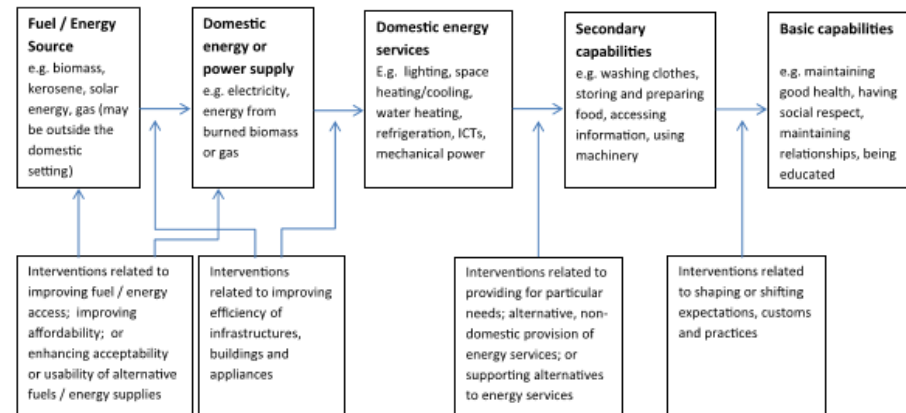


Energy Efficiency and Energy Sufficiency: what are they?

- Efficiency has currently more space in European and national policy agendas
- Sufficiency revolution should accompany efficiency, showing the right direction
- According to the doughnut economy approach, lack of sufficiency in two cases: ***not enough (inner circle) or too much (outer circle)***

- Capabilities approach to energy poverty →

energy poverty could be seen as a shortfall of sufficiency ←



Day et al, Energy Policy 2016

- Sustainability and equity are also relevant

Different but with something in common

- A role to play in fighting energy poverty, multiple benefits, rebound effect
 - EPOV secondary indicators show very well that energy poverty is a lack of sufficiency
 - Energy poor households could be locked-in, having affordability problems for energy renovation and changing living conditions
 - Energy poor households may not own at all some energy devices, have inefficient ones or do not use other ones in a sufficient way
- Both efficiency and sufficiency actions would be win-win solutions and generate multiple benefits**
- Rebound effect generally lower for sufficiency than for efficiency
- Rebound effect is generally higher for energy poor households: what about equity?**
- Measurement of efficiency and sufficiency is very different

Energy Sufficiency actions: where, how?

- Sufficiency is key in achieving sustainability targets
- Affordability by everyone of many sufficiency actions / Possibility of win-win solutions
- Potential for policy action around social norms, to influence what is perceived as fundamental need (i.e. **devices** ownership and size)
- For **private transport**, sufficient mobility modes are available but rethinking cities in a smart approach would help
- For **buildings**, sufficiency actions become viable if specific conditions exist
- Sufficiency strategies could be identified in a matrix combining people needs, cities constraints and potentialities, current legislation
- No one-size-fit-for-all solution

Energy Poverty recommendations: which role for Energy Sufficiency?

1. **EU harmonised energy poverty definition** could usefully inform sufficiency paradigm
2. Key role of **energy efficiency measures** for reducing energy poverty and solving a lack of sufficiency problem, but attention to rebound effects, equity and agreement on fundamental needs
3. The need for an **integrated approach** for policy intervention against energy poverty is consistent with sufficiency multiple benefits
4. Consideration of **equity and distributive impacts** relevant for both energy poverty and sufficiency
5. Behavioural change is an essential leverage of a sufficiency revolution, and it can be enhanced by **information and training campaigns**