



Confronting system boundaries of energy statistics

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Boundaries of the statistical system for energy

- **Energy statistics needs *clearly defined system boundaries for energy flows we monitor for statistical purposes***
- **These boundaries should be consistently defined for all fuels and all technologies – there should be no preferential treatment of certain fuels or technologies**
- **We need to clearly communicate these boundaries to users of our energy data**
- **This presentation does not present solutions, but only arguments why this is an important topic to further discuss**

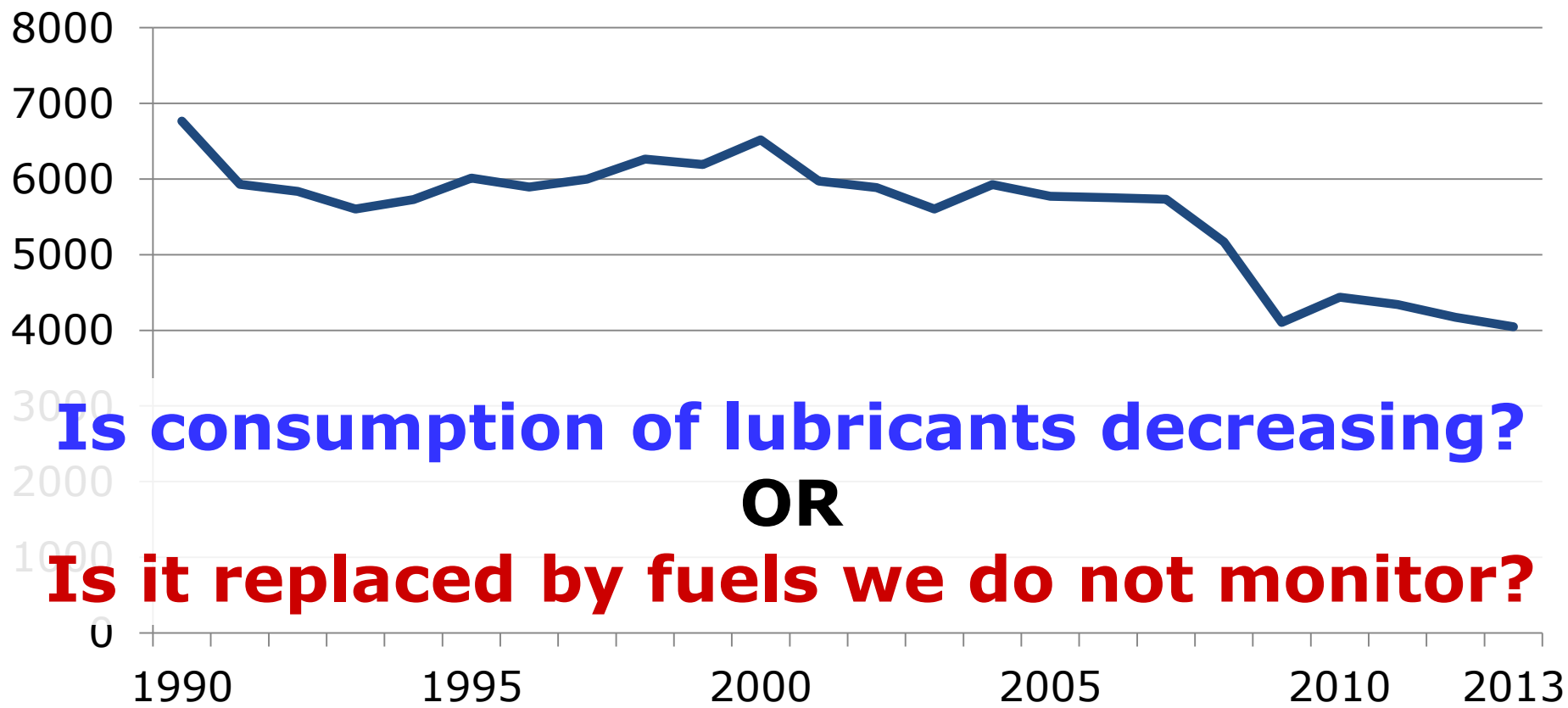
Biolubricants / 1

Renewables consumed for non-energy purposes are excluded from reporting in the joint annual energy questionnaires.

However, they genuinely contribute to reduction of consumption of fossil fuels that are to be reported.

Biolubricants / 2

EU28, Lubricants (ktoe)
Total final non-energy consumption



Is consumption of lubricants decreasing?

OR

Is it replaced by fuels we do not monitor?

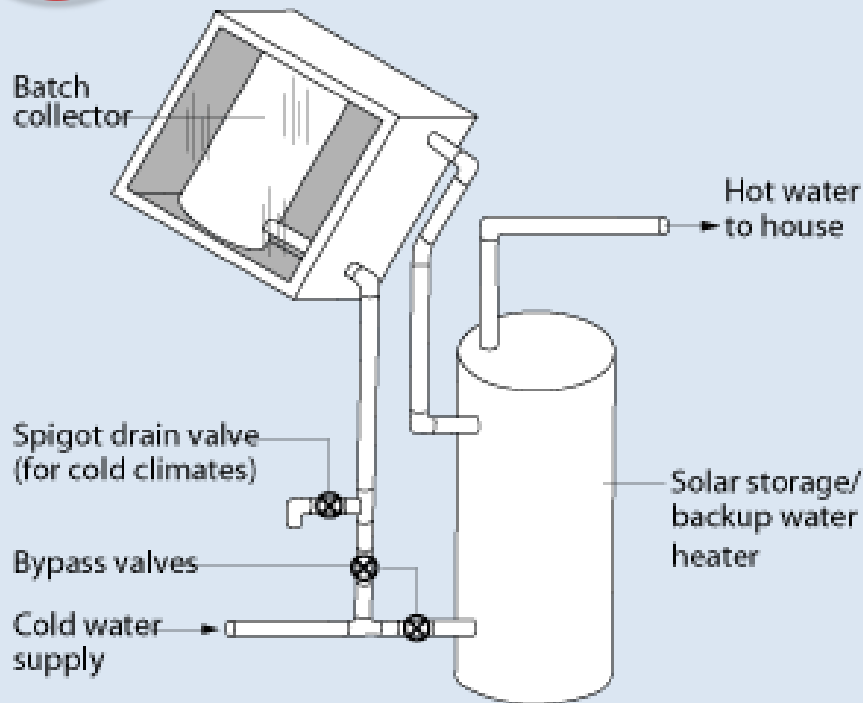
Solar thermal water heating / 1



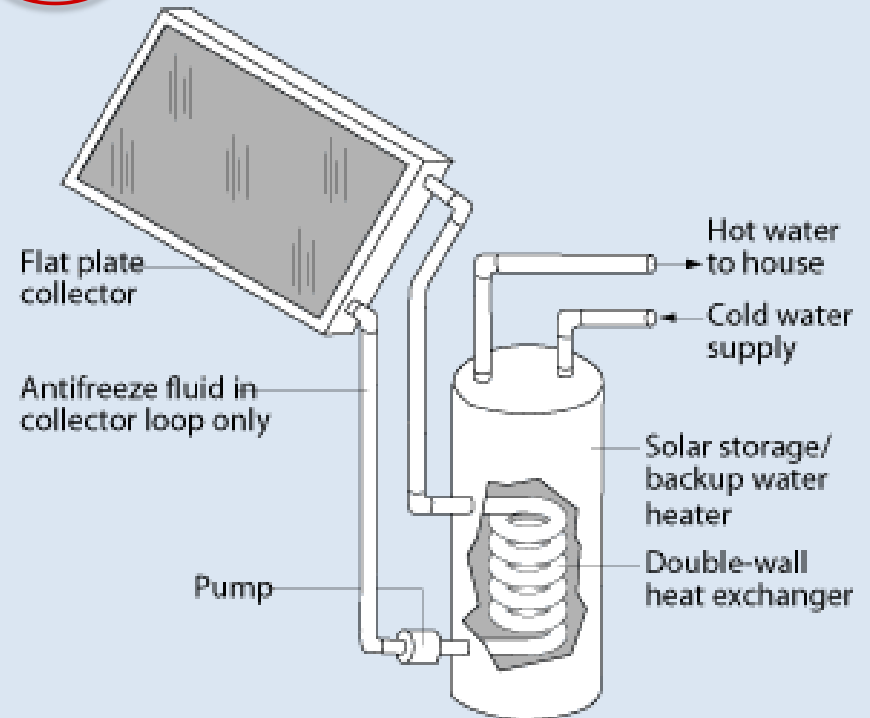
Simple and effective solution for delivering hot water for various purposes: sanitary hot water, heating of swimming pools, ...

Solar thermal water heating / 2

Passive Batch Solar Water Heater



Active, Closed Loop Solar Water Heater



What is the real conceptual difference between active and passive systems?

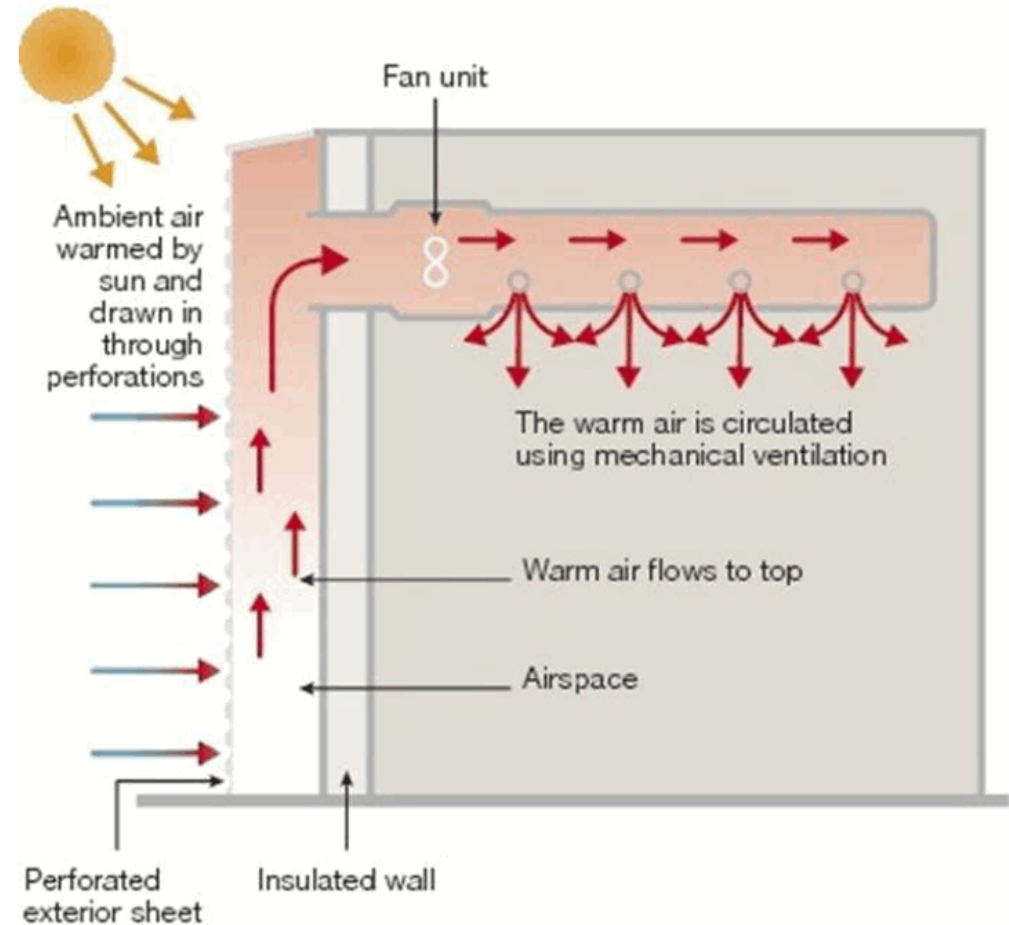
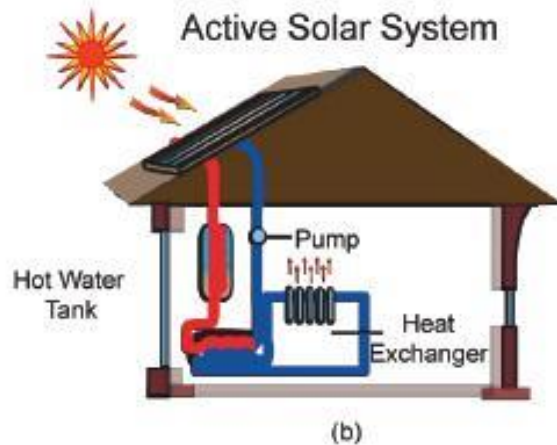
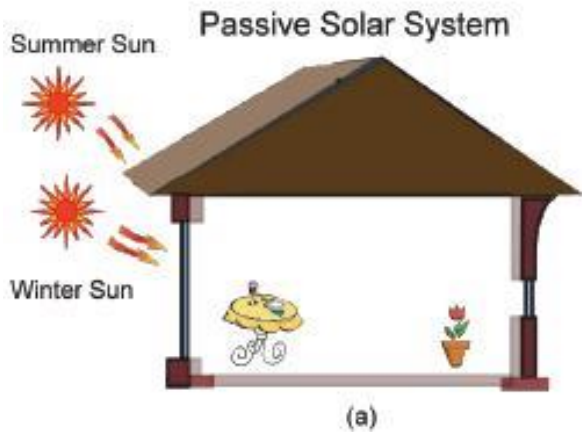
Solar thermal water heating /3

Why only some hot water consumed for sanitary purposes in buildings is to be reported? Why some simple, efficient and effective technologies are not to be reported?

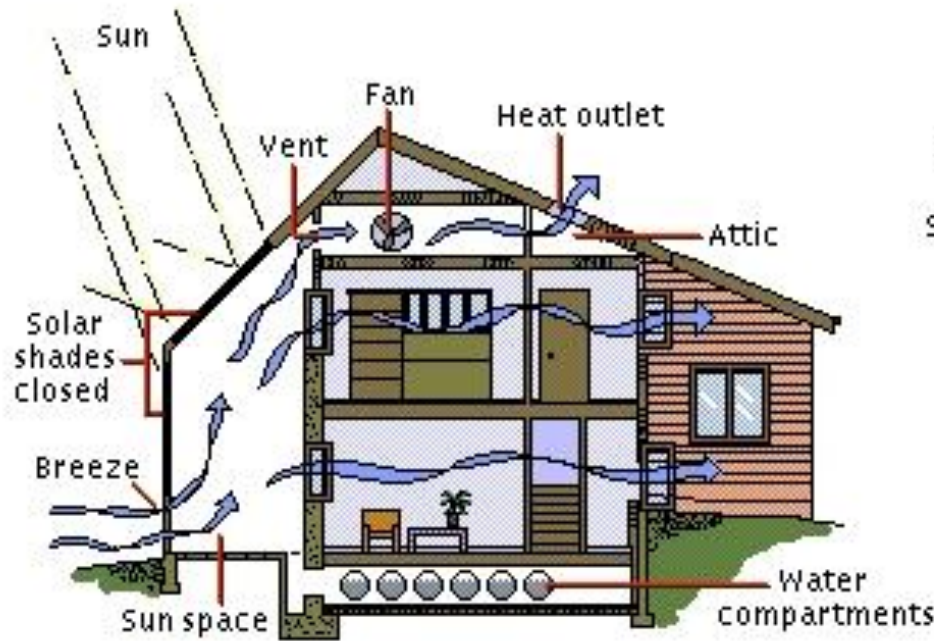
Are policy makers aware which technologies are eligible for accounting towards statistical accounting of renewable energy?

Are policies promoting use of renewable energies intended to promote the use of solar thermal energy used for the seasonal heating of swimming pools?

Solar thermal space heating / 1

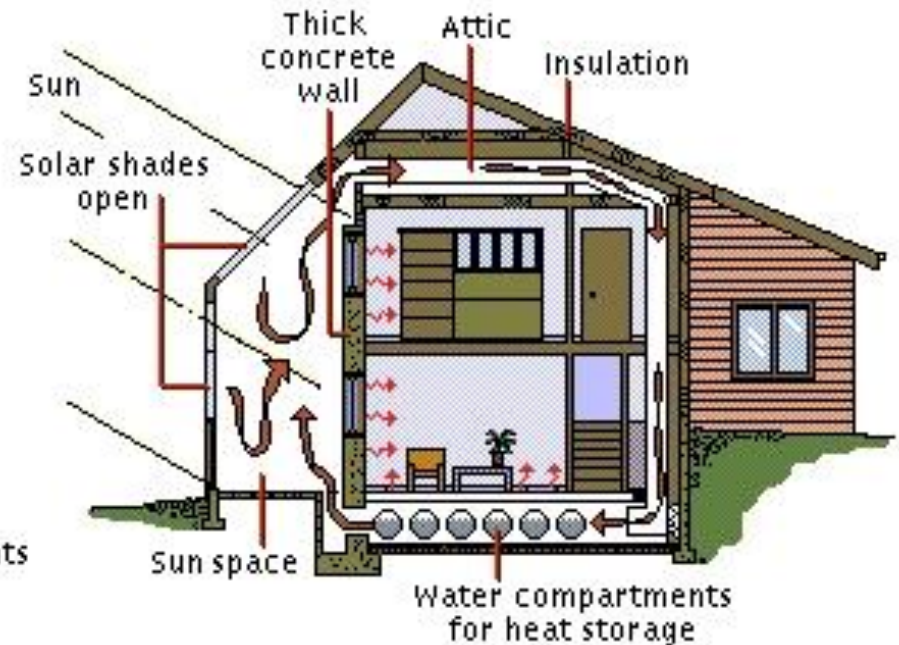


Solar thermal space heating / 2



**Passive solar cooling
(Summer)**

Microsoft Illustration



**Passive solar heating
(Winter)**

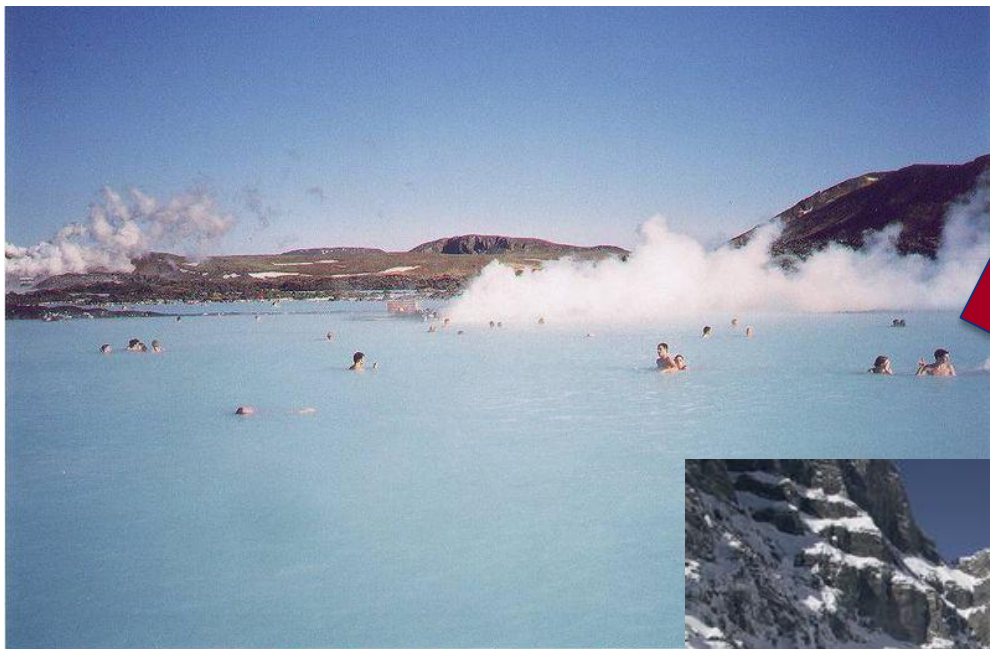
Solar thermal space heating / 3

In the modern deployment of solar thermal heating systems , active and passive technologies are often blended together.

Our statistical definitions **might be** influencing real world business decisions and deployment of certain technologies.

Should our statistical definitions be defined by policy makers deciding on eligibility of renewable technologies for financial support?

Geothermal energy / 1



**EXCLUDED FROM
ENERGY STATISTICS**



**INCLUDED IN
ENERGY STATISTICS**

Geothermal energy / 2

Several EU countries report geothermal energy used in spa (health baths) and indoor/outdoor swimming pools.

Are all reporting countries aware that such use of geothermal energy should be reported?

Is energy statistics for geothermal energy comparable on international level?

Boundaries of the statistical system for energy

- Reporting some renewable energy technologies is challenging for the energy statistic system of fossil fuels.
- In order to deliver harmonized energy data that are comparable across countries and regions, system boundaries have to be clearly defined.
- These system boundaries have to be communicated to users of our data.
- Eurostat highly support wider conceptual reflection on the system borders of energy statistics established on the technology neutral approach.



Thank you for your attention!

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