

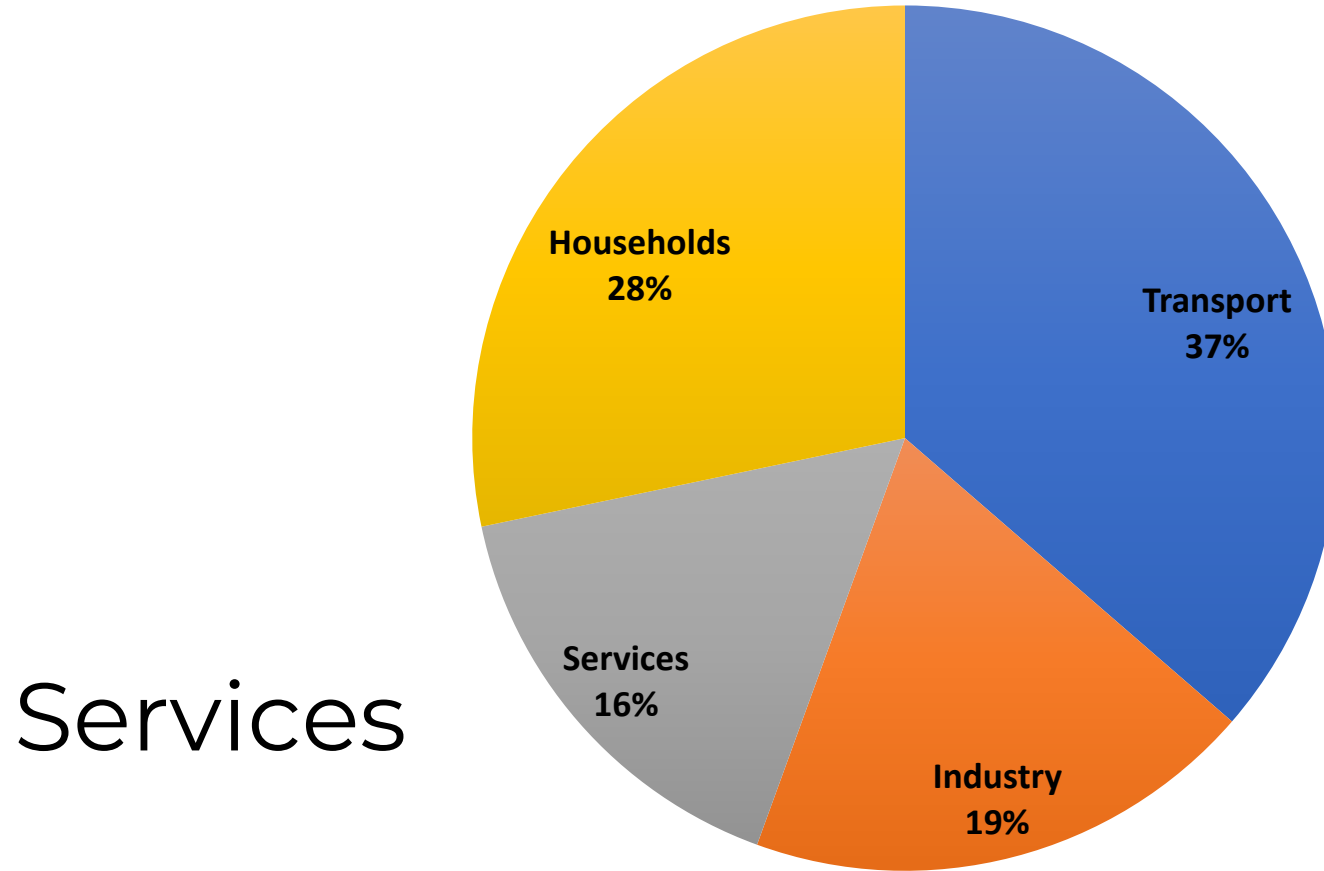
Energy Efficiency Indicators for Service and Household Sectors

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Mohammadreza Kolahi, Mostafa Babaei, Martin Patel

Group for Energy Efficiency, Institute for Environmental Sciences and Department F.-A. Forel for Environmental and Aquatic Sciences,
University of Geneva

Final Energy by End-Use Sectors (2021)



Services

Breakdown of Total Final Energy (TFE) by end-use sectors in Switzerland (SFOE, 2023)

Introduction to Service ODEX

*Service ODEX:
Aggregate indicator based
on **EE trends for electricity
and fuel** demand based on
their share in TFE*

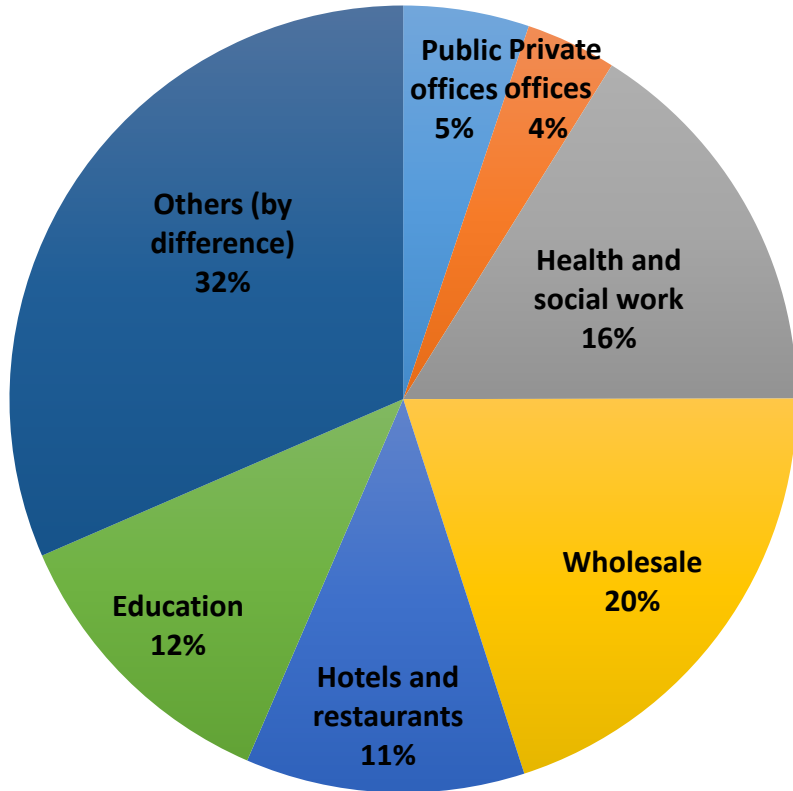
*The EE trends:
Aggregate **UC indices for electricity and
fuel** respectively for individual subsectors
based on each one's **share in TFE***

*The unit consumption (UC):
Estimated as the ratio of the **subsector's electricity and fuel demand
and its number of employees***

Subsectors:

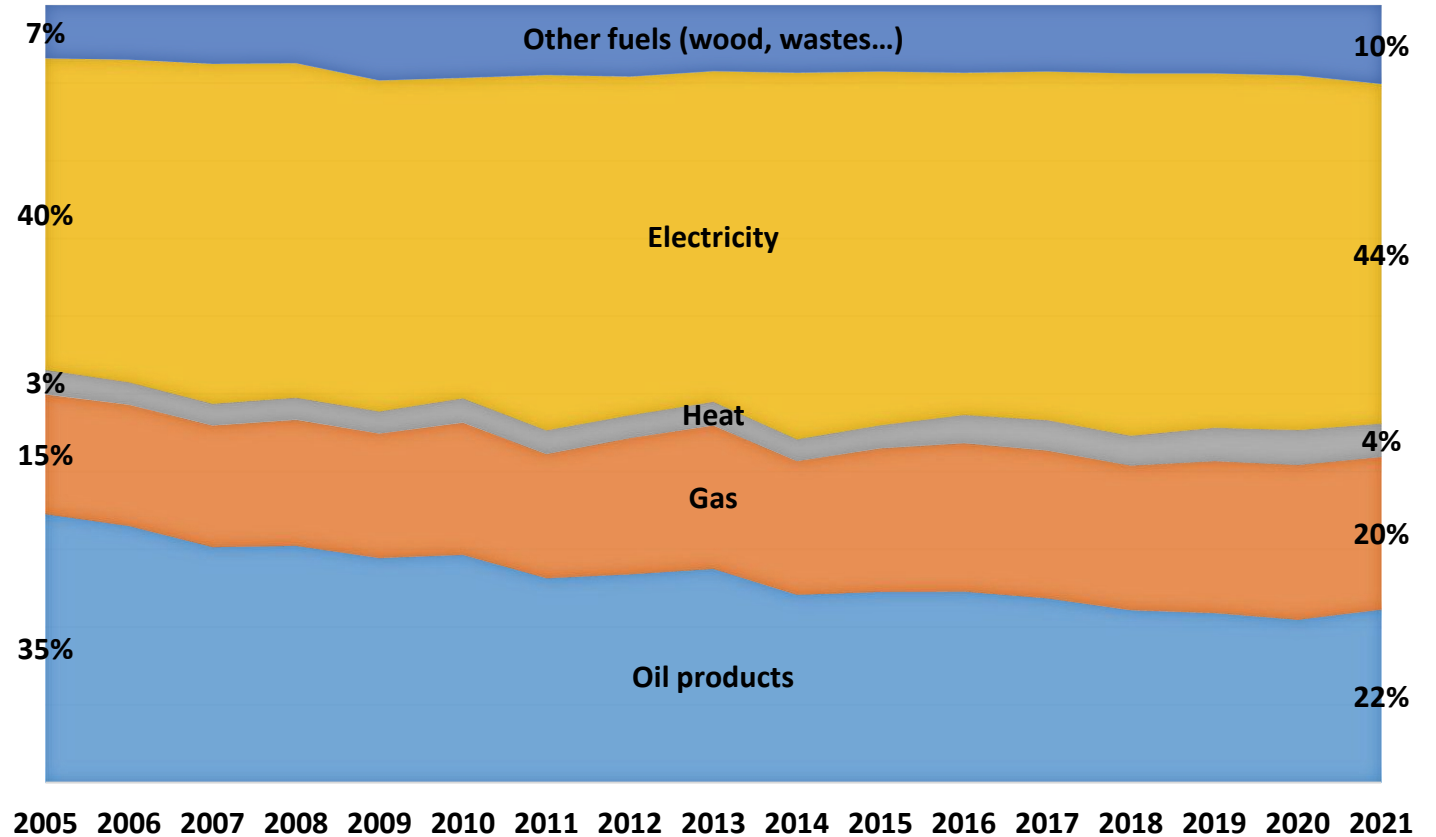
- Public administration and government services building
- Private offices
- Hotels & restaurants
- Hospitals
- Wholesale and retail trade services building and
- Education buildings

Service Sector: Overview



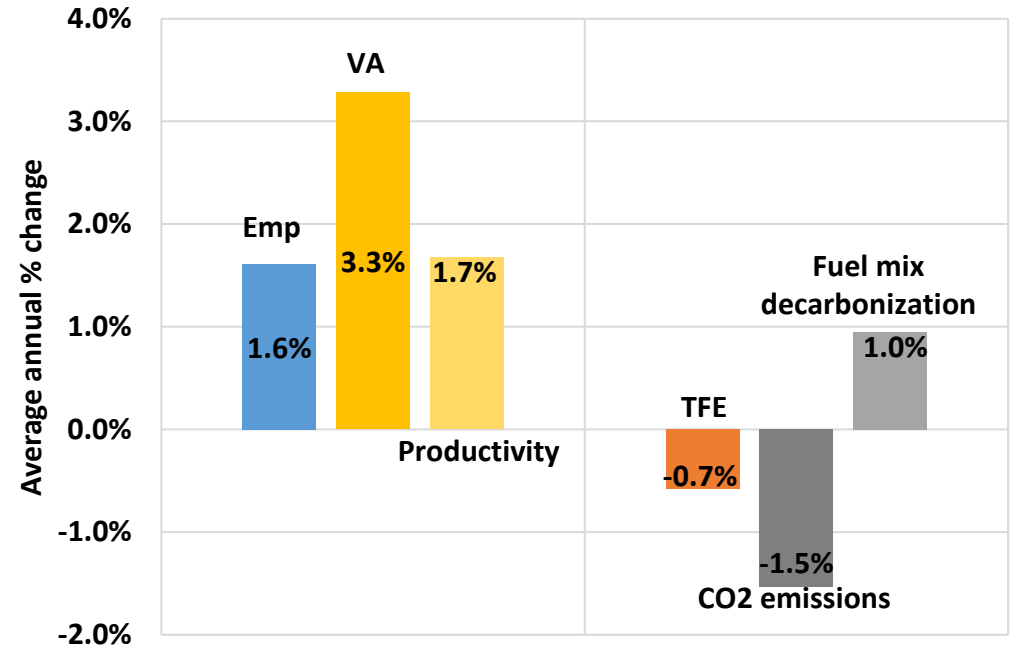
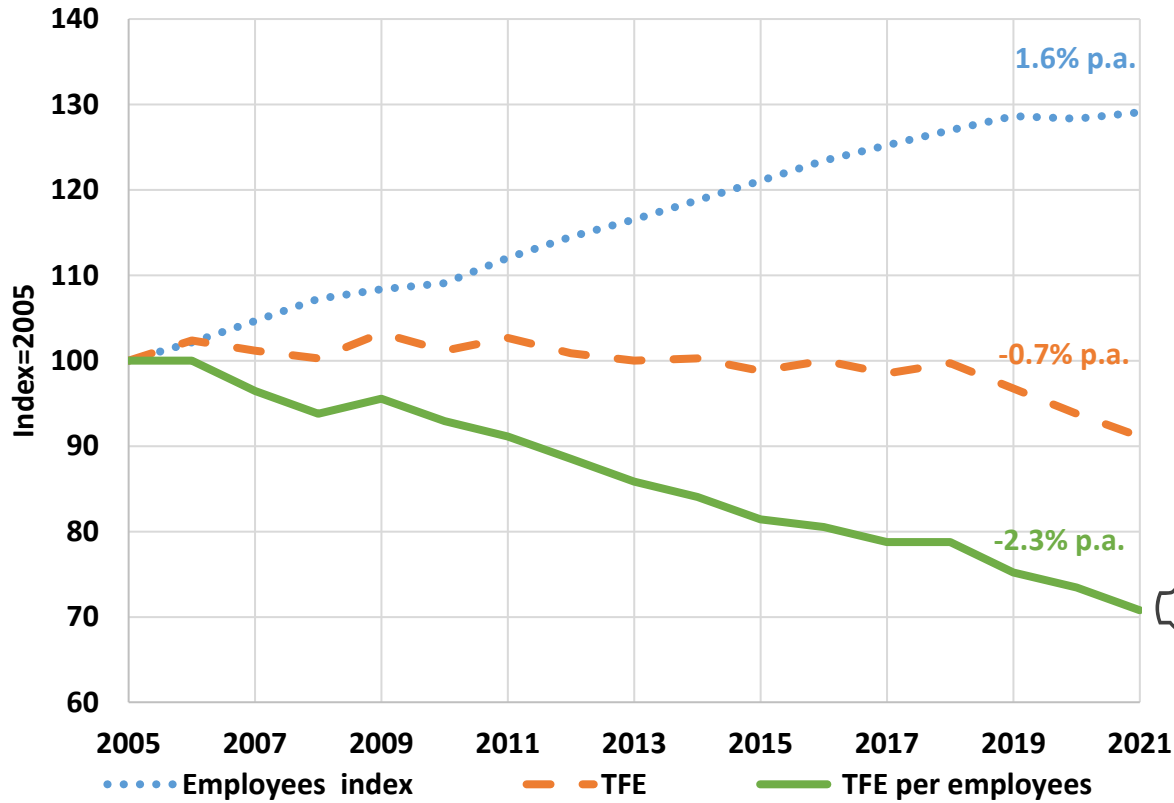
Energy consumption of services by subsector (2021)

Source: SFOE

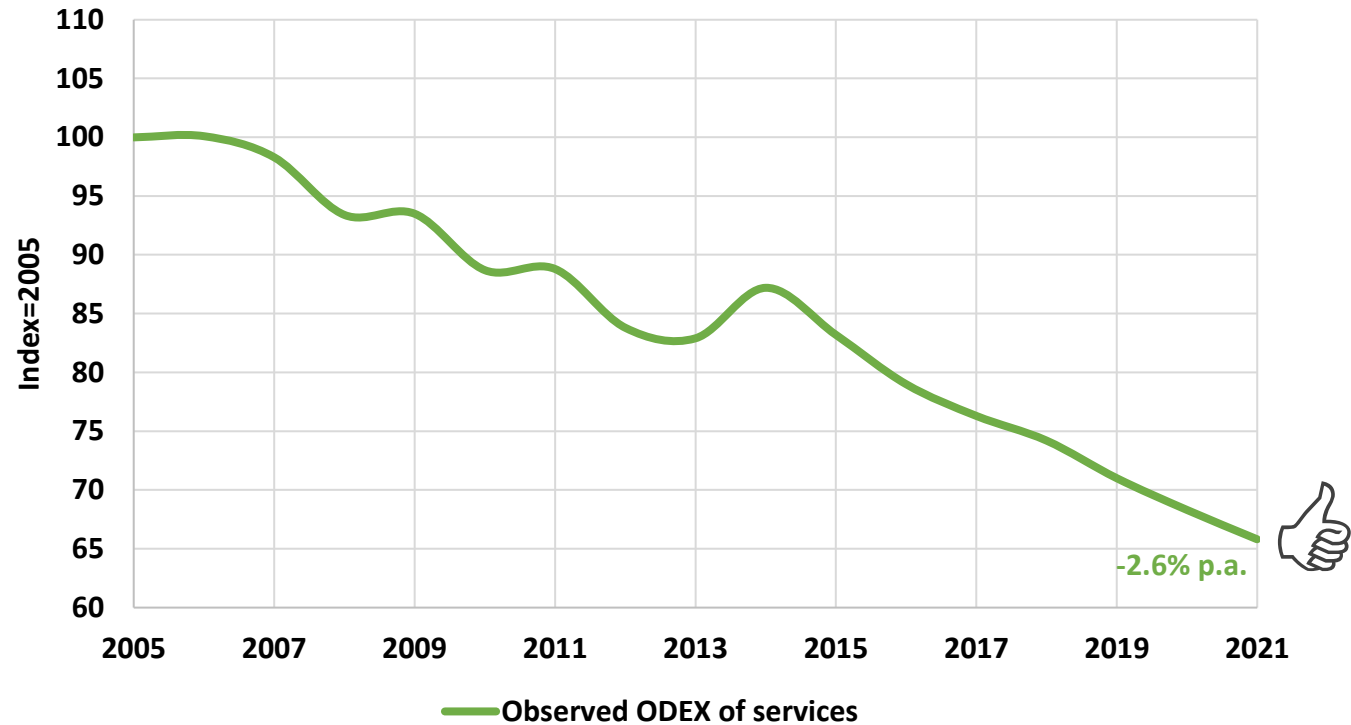


Source: SFOE

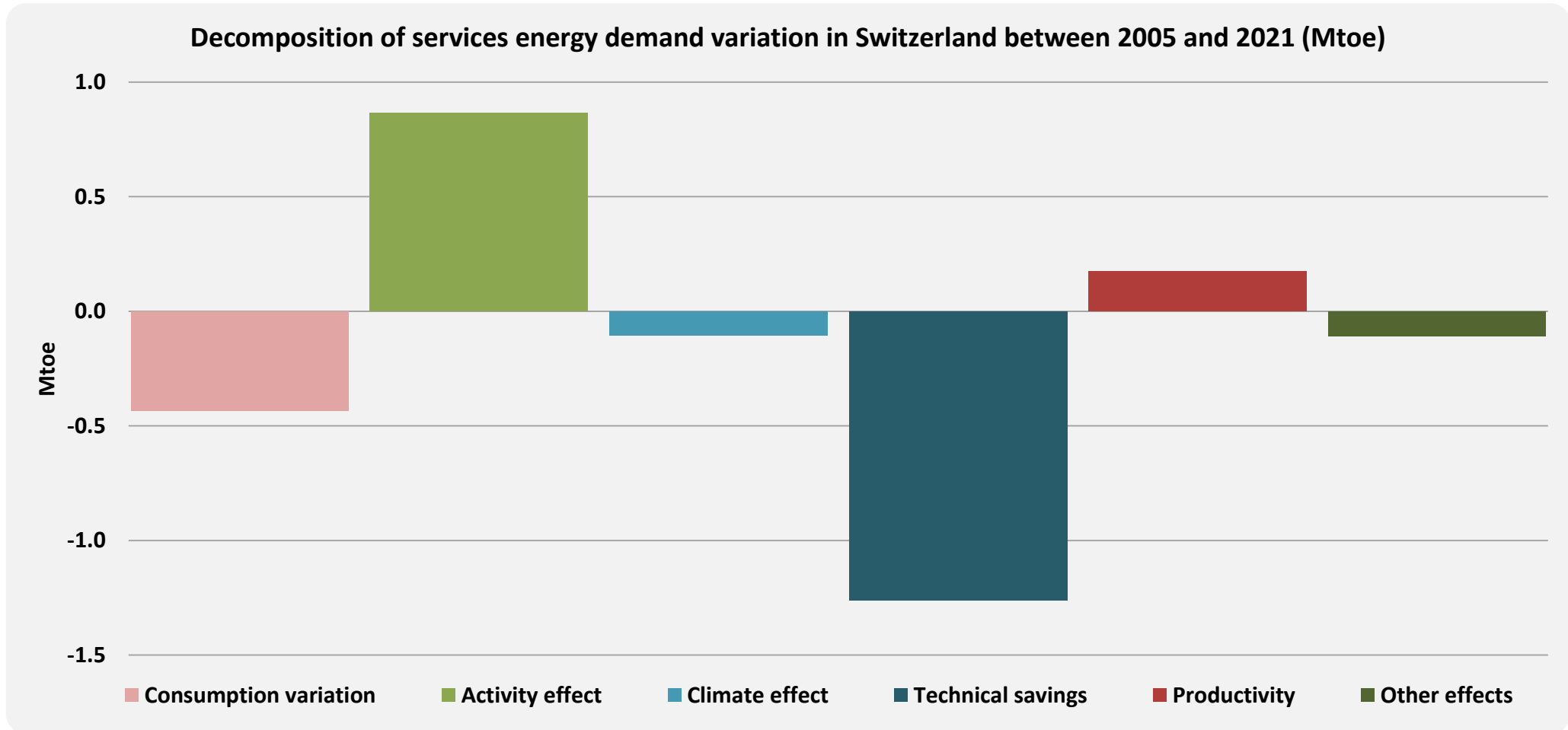
Service Sector: Indexes



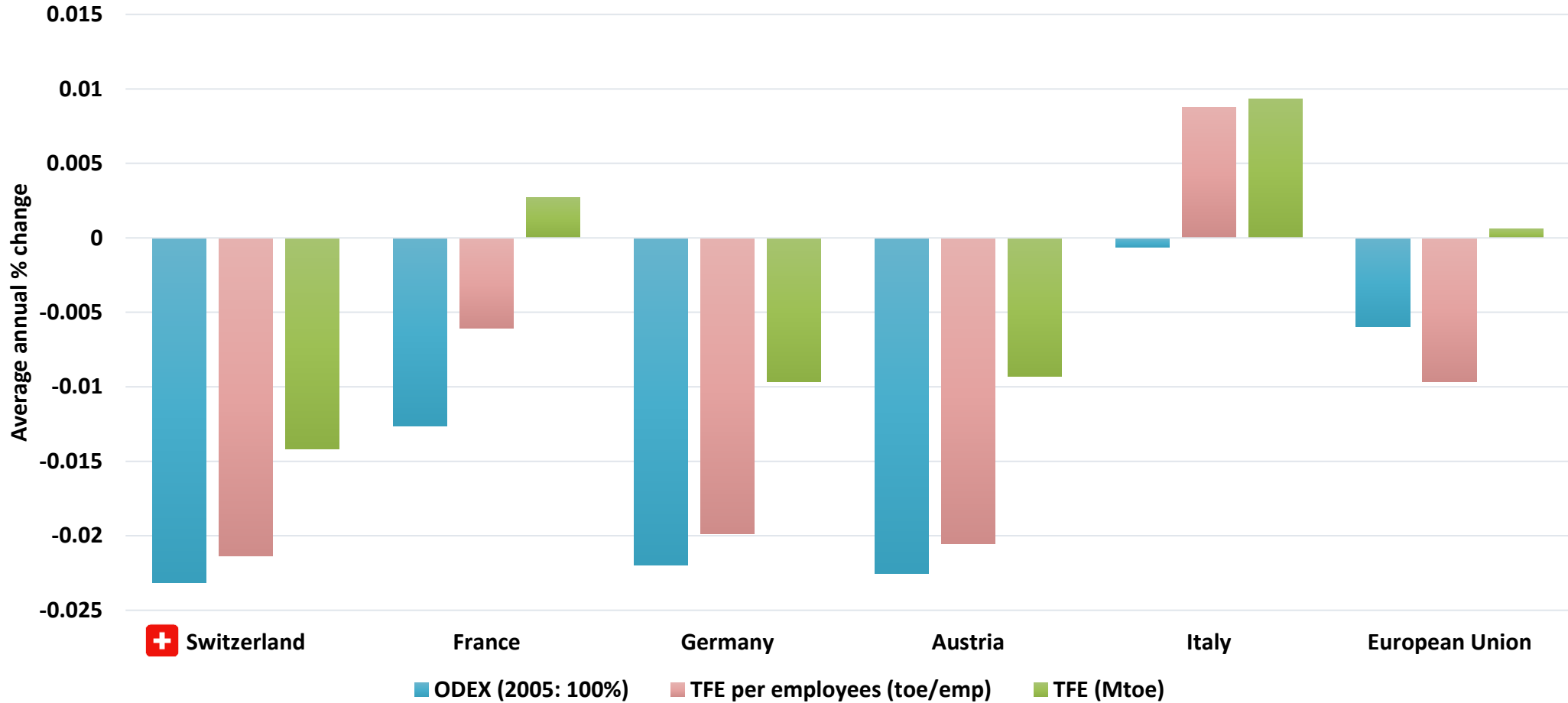
Service ODEX



Decomposition analysis for Services

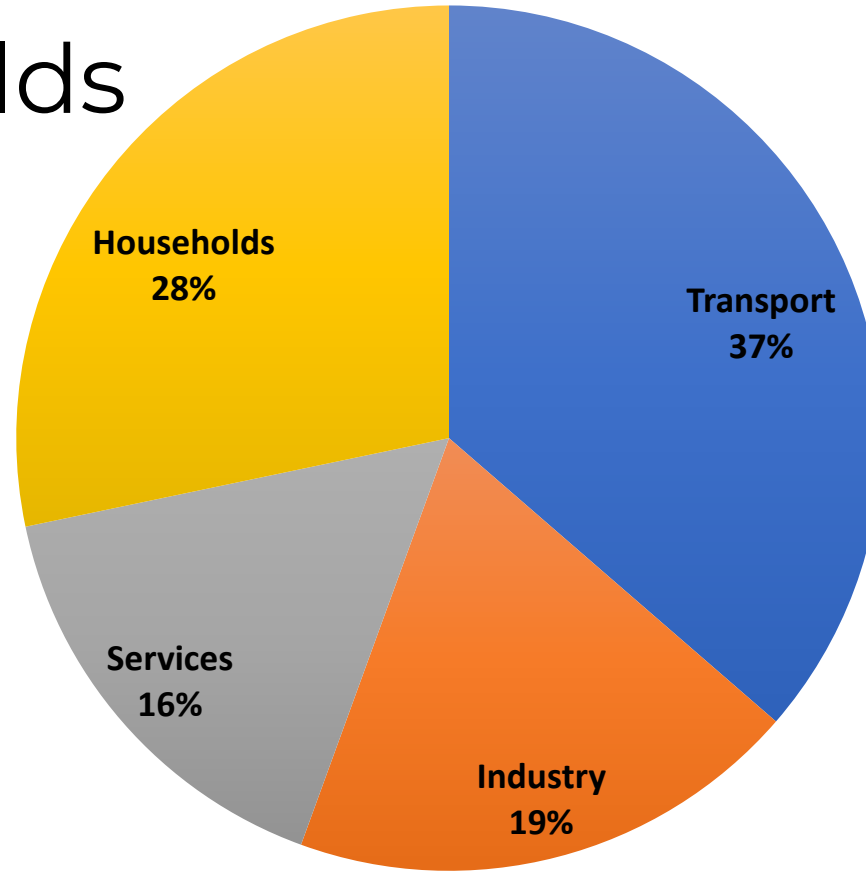


Country comparison: Services (2005-2021)



Final Energy by End-Use Sectors (2021)

Households



Breakdown of Total Final Energy (TFE) by end-use sectors in Switzerland (SFOE, 2023)

Introduction to Household ODEX

Household ODEX:
aggregate UC trends of **3
end uses and 5 large
appliances** based on their
share in TFE demand

The EE trend for all **5 appliances**:
UC indices of individual appliances types
weighted by their **share in TFE**

The UC trends:
Space heating energy use **per unit of floor space**
Hot water and cooking energy use **per occupied dwelling**
Particular Appliance energy use by **its stock (kWh/appliance/year)**

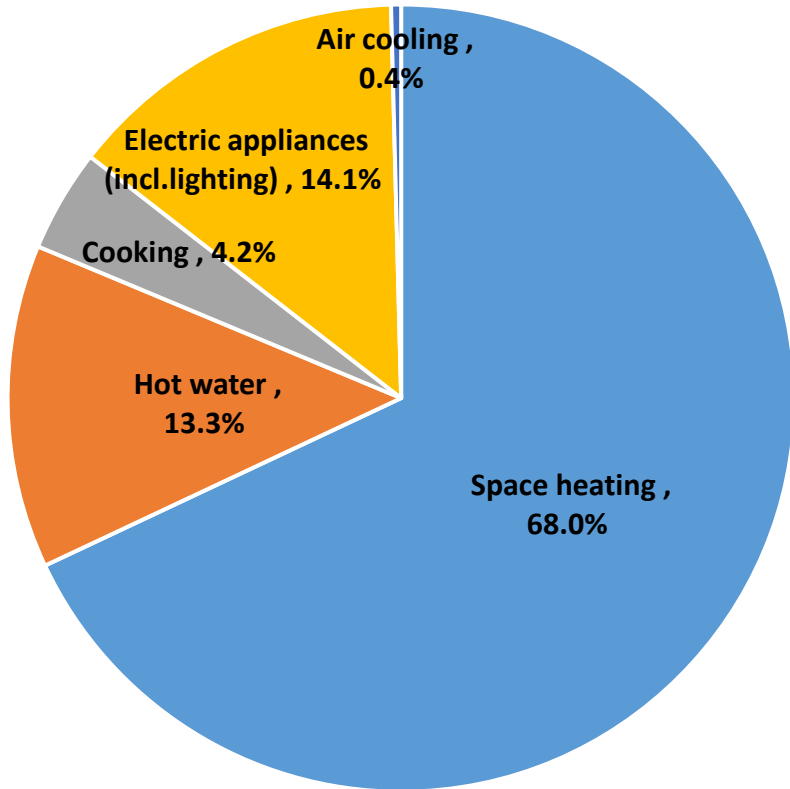
Three end uses:

- Space heating
- Hot water
- Cooking

Five large appliances:

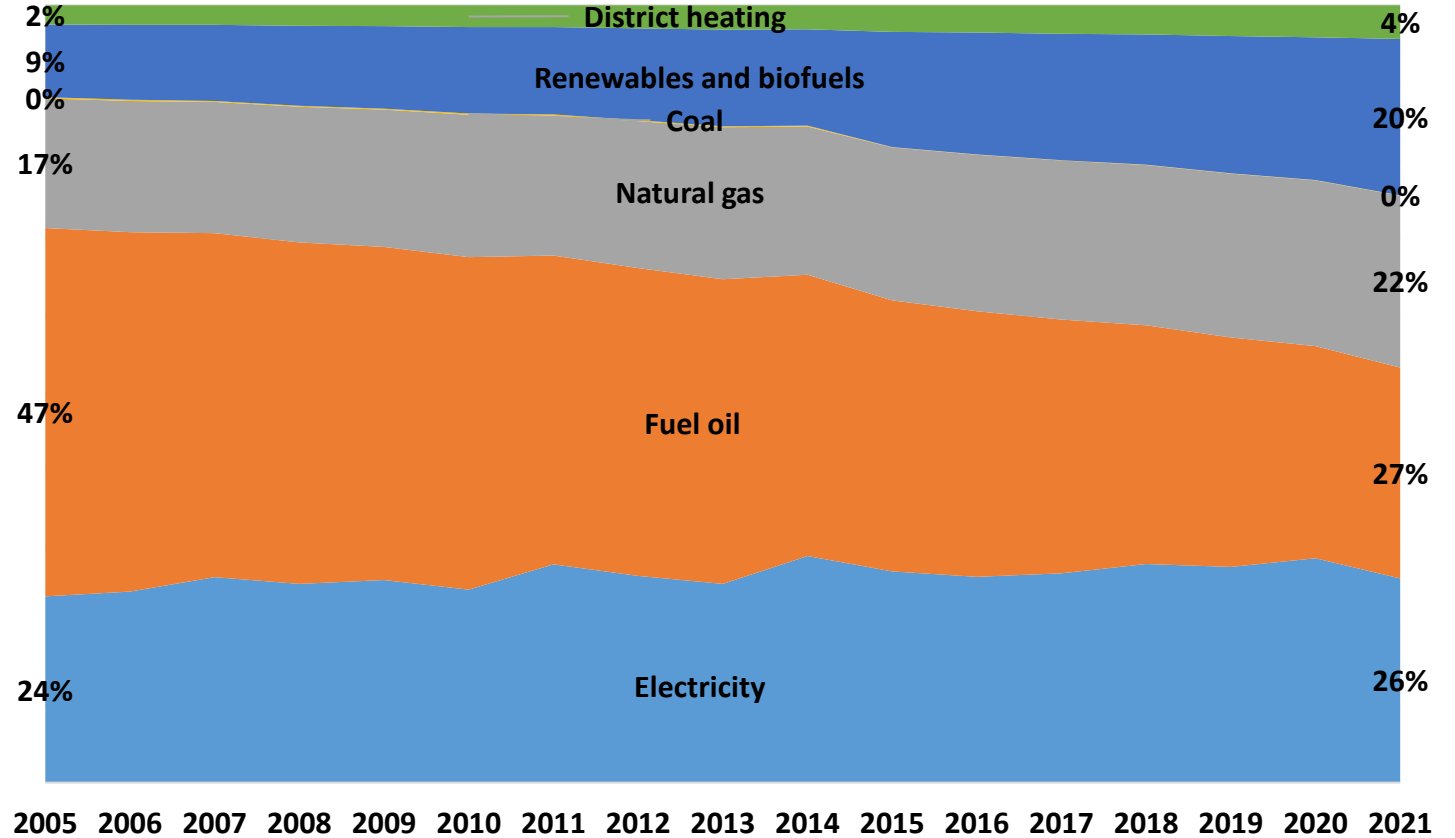
- Refrigerators
- Freezers
- Washing machines
- Dishwashers
- TVs

Household Sector: Overview



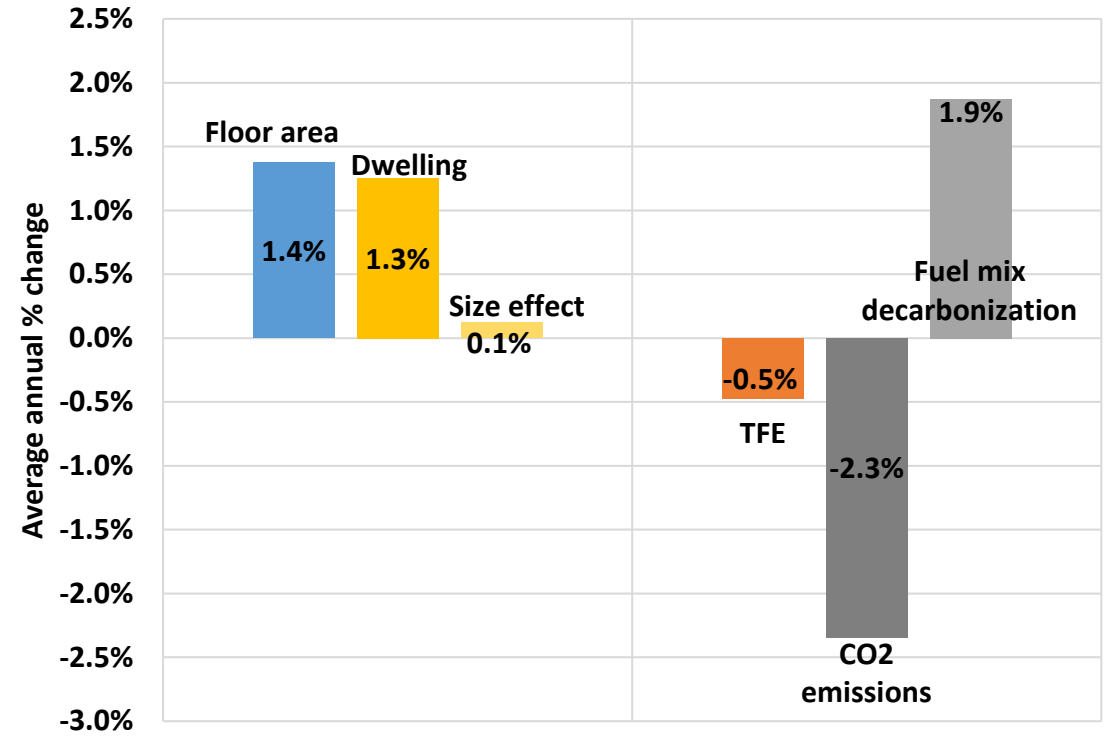
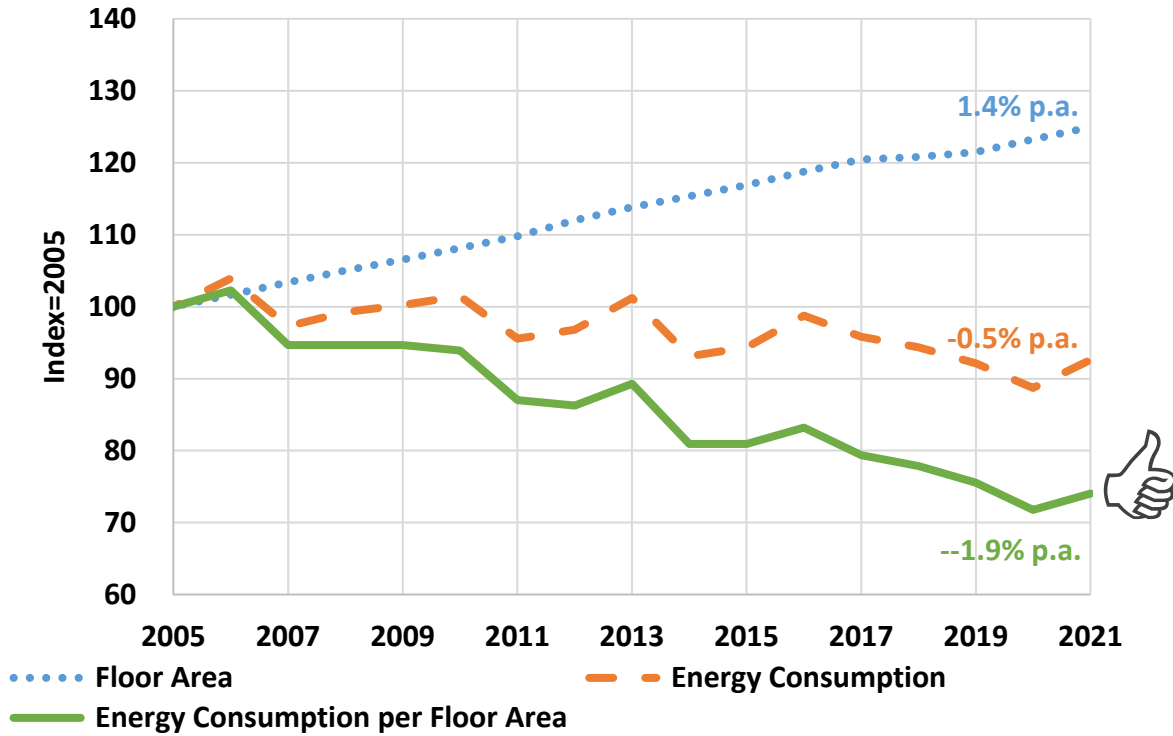
Energy consumption of households by subsector (2021)

Source: SFOE

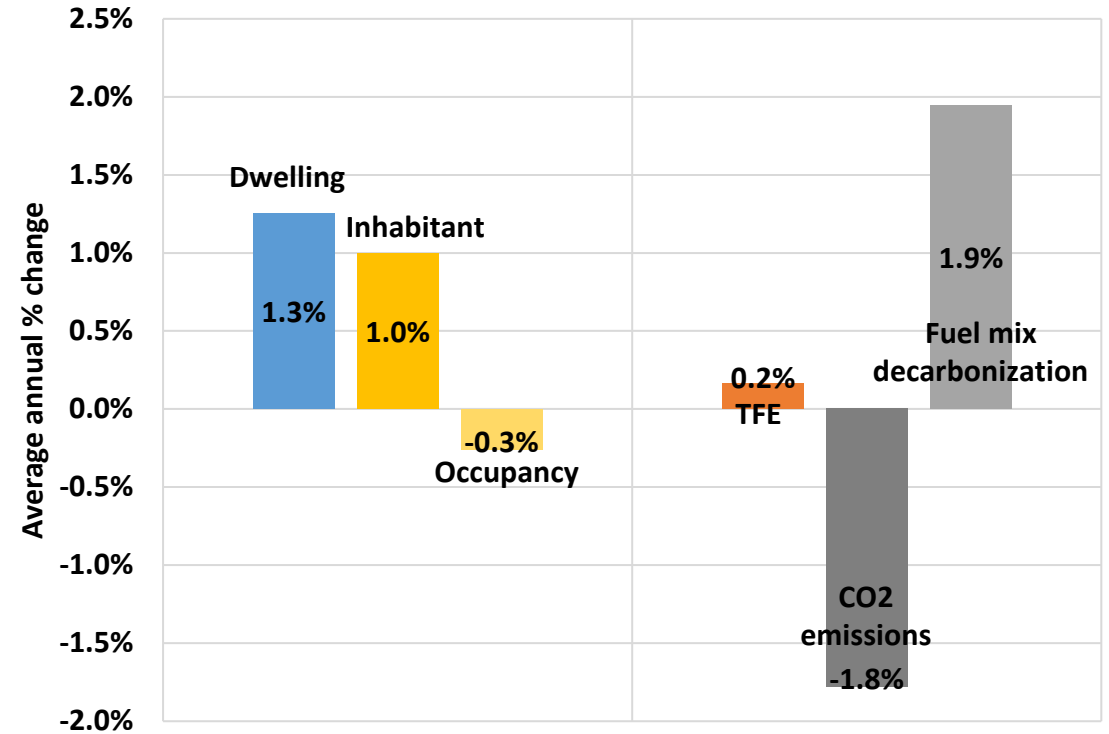
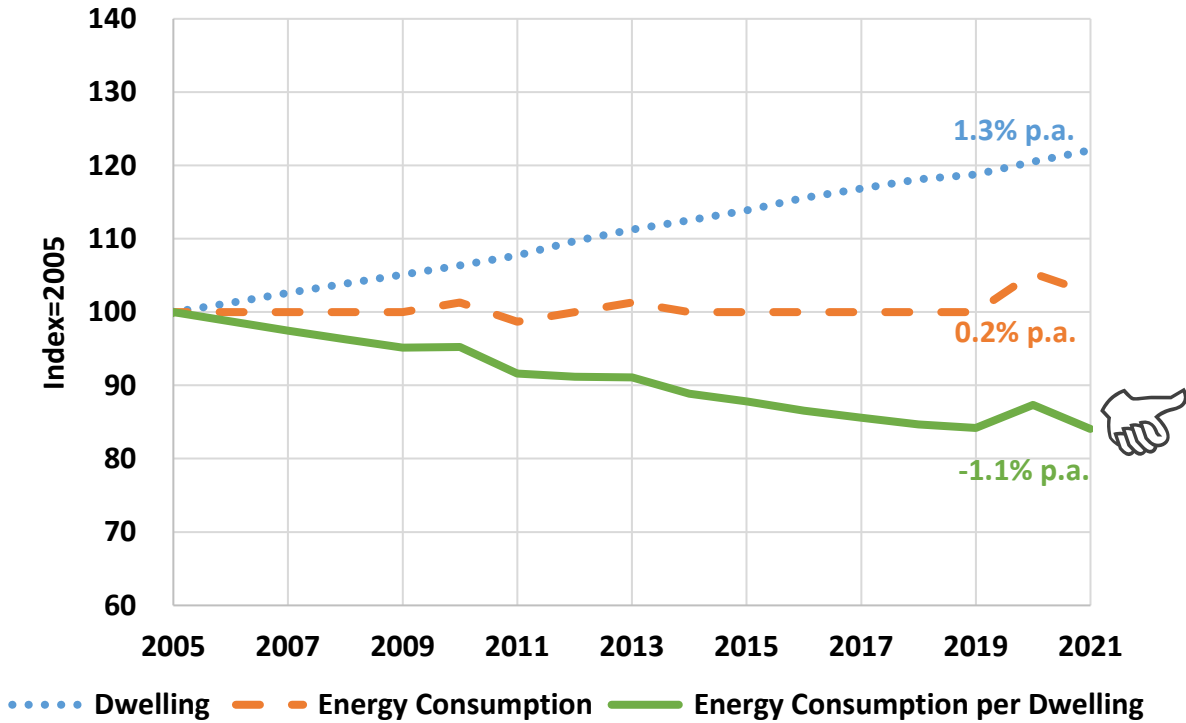


Source: SFOE

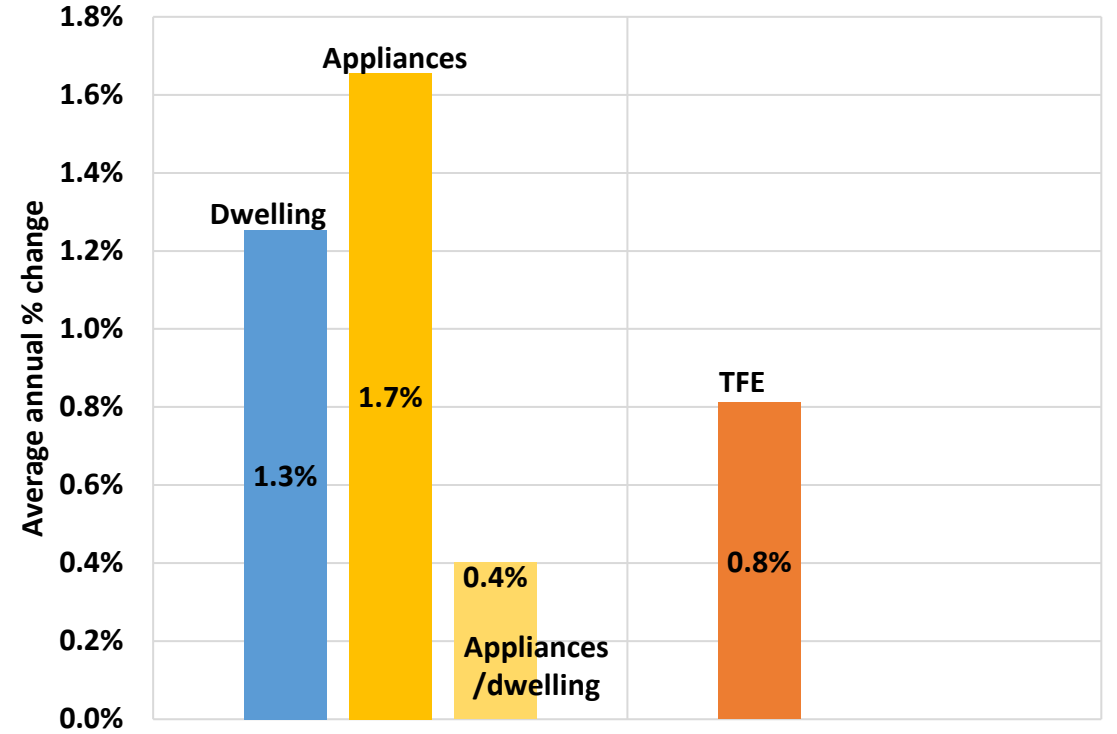
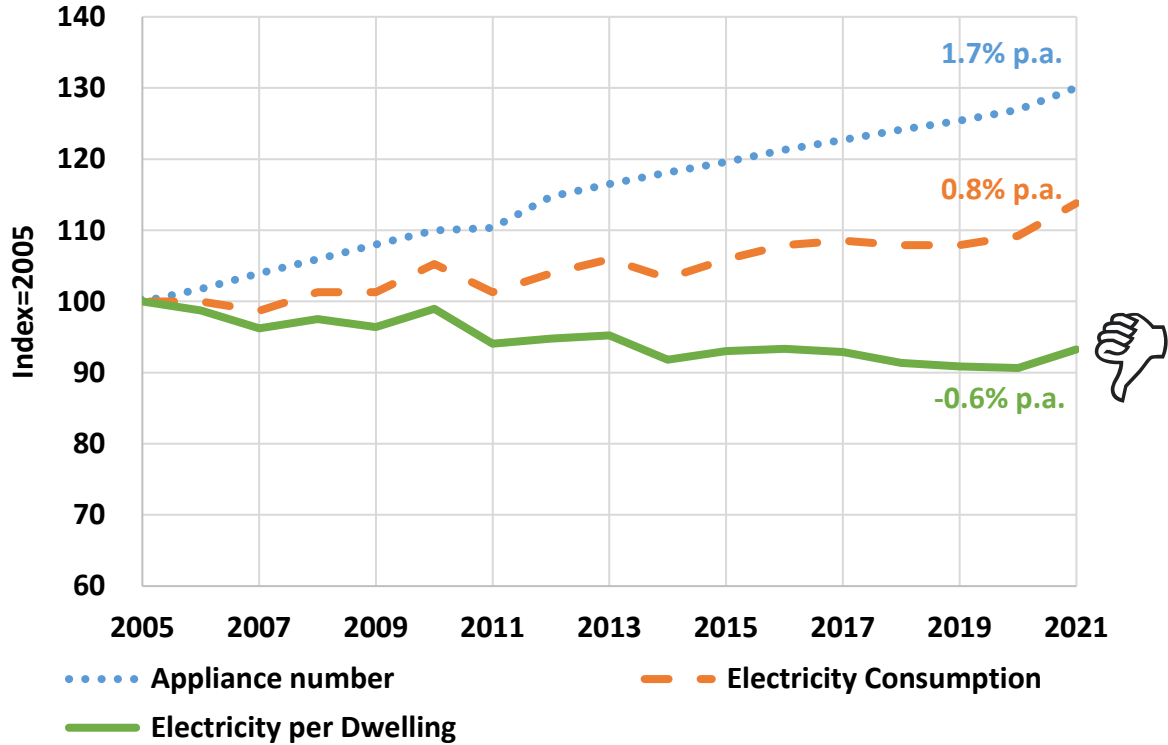
Space heating (68% TFE): Indexes



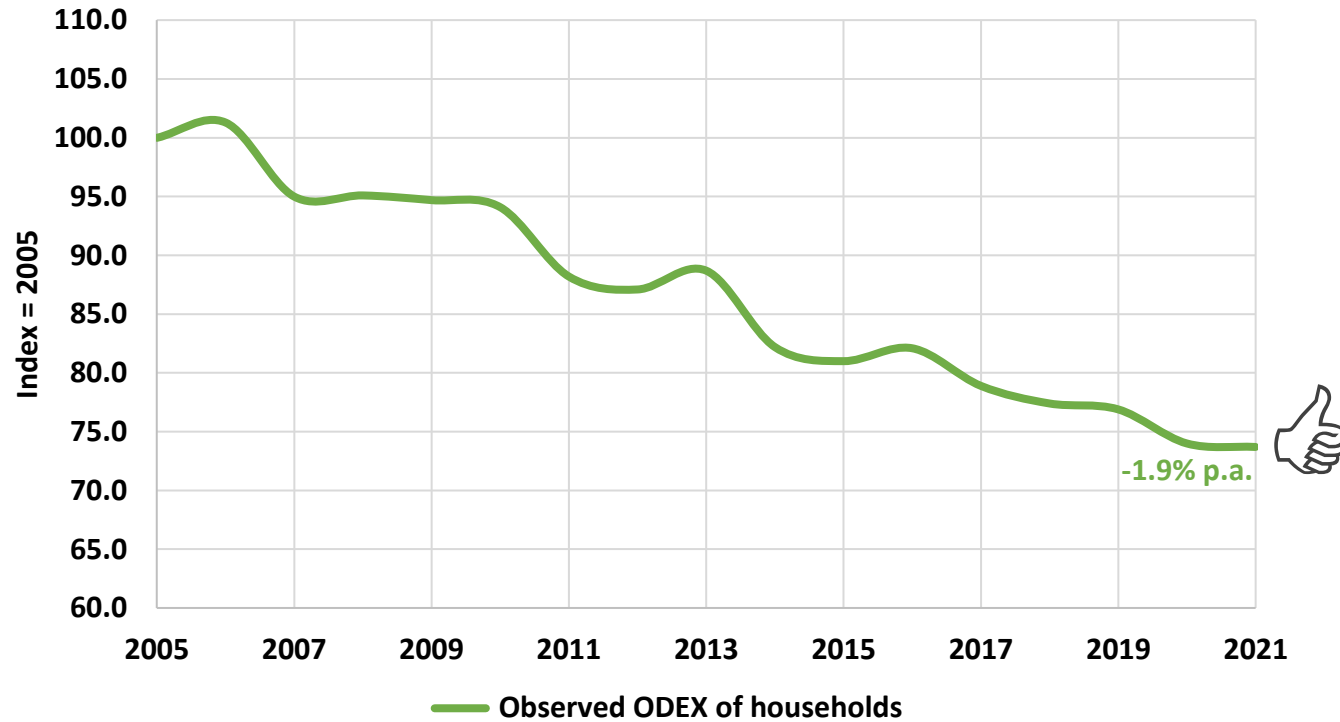
Hot water (13% TFE): Indexes



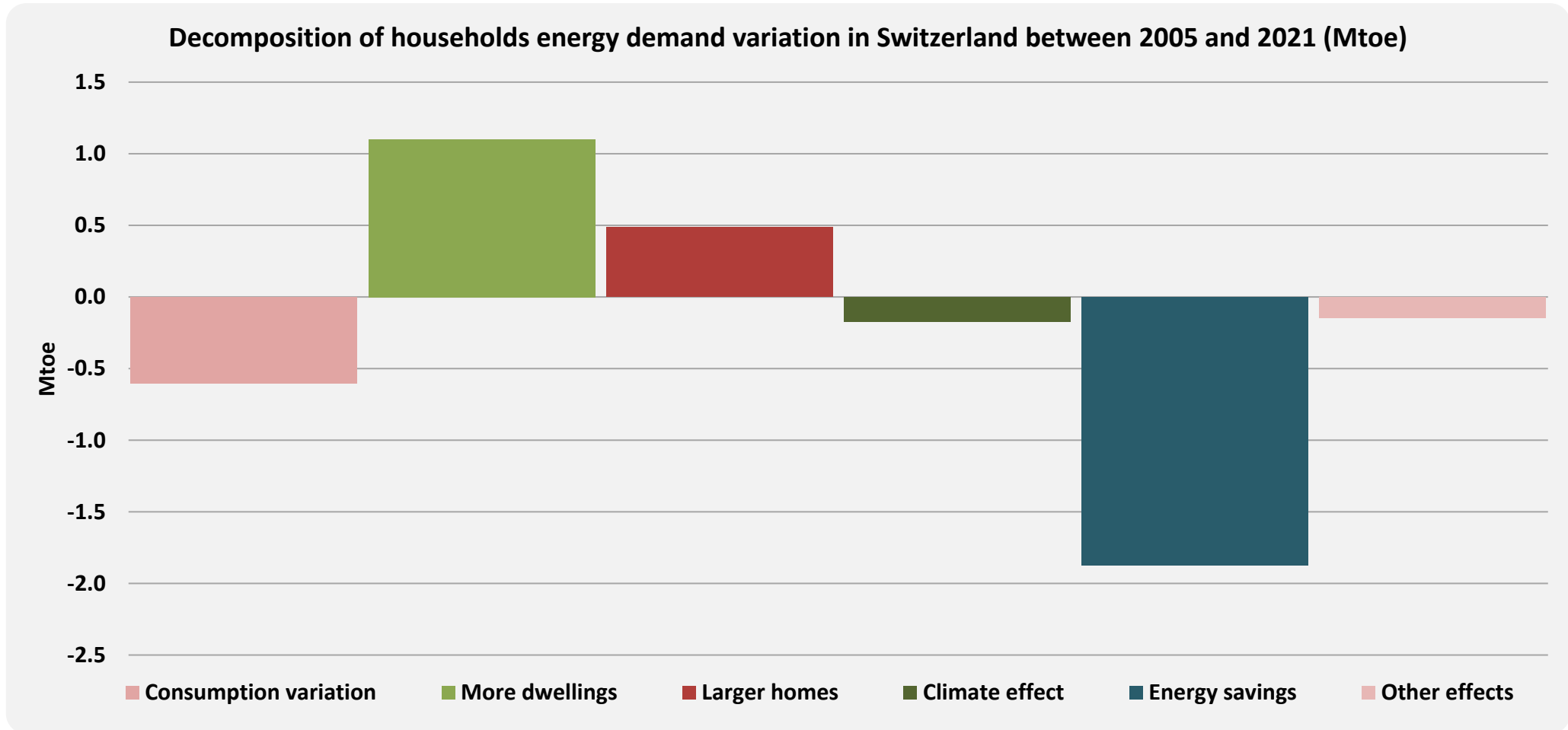
Lighting & Appliances (14% TFE): Indexes



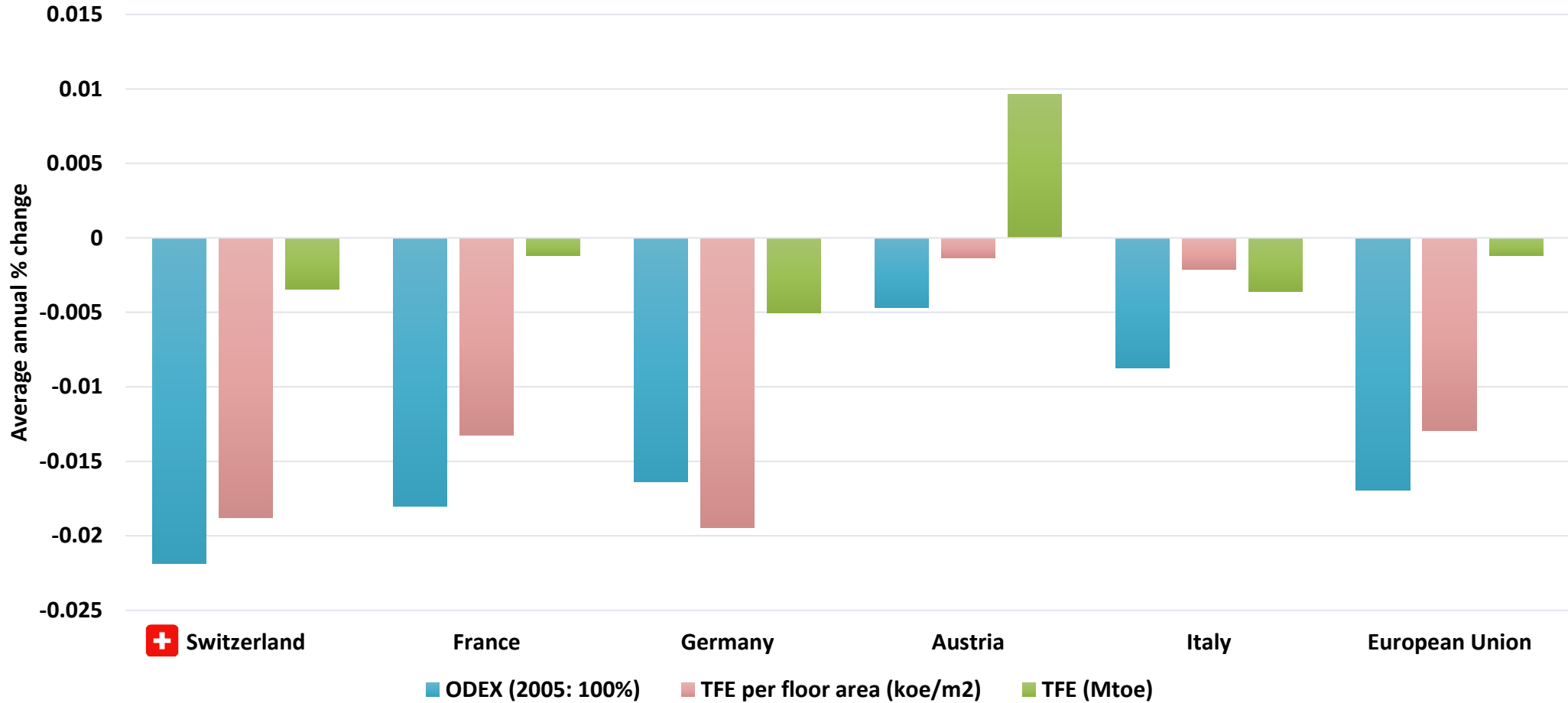
Household ODEX



Decomposition analysis for Household



Country comparison: Household (2005-2021)



Additional slide: Household floor area

