



Household energy use regarded as energy orders

Practical implications for housing companies

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Background

- Household energy use does not decrease as much as expected
- Low energy buildings
- Household energy use (appliances and behaviour) seldom taken into account, not included in building codes
- What does appliance use in households look on a detailed level and what can housing companies learn from that?

Method

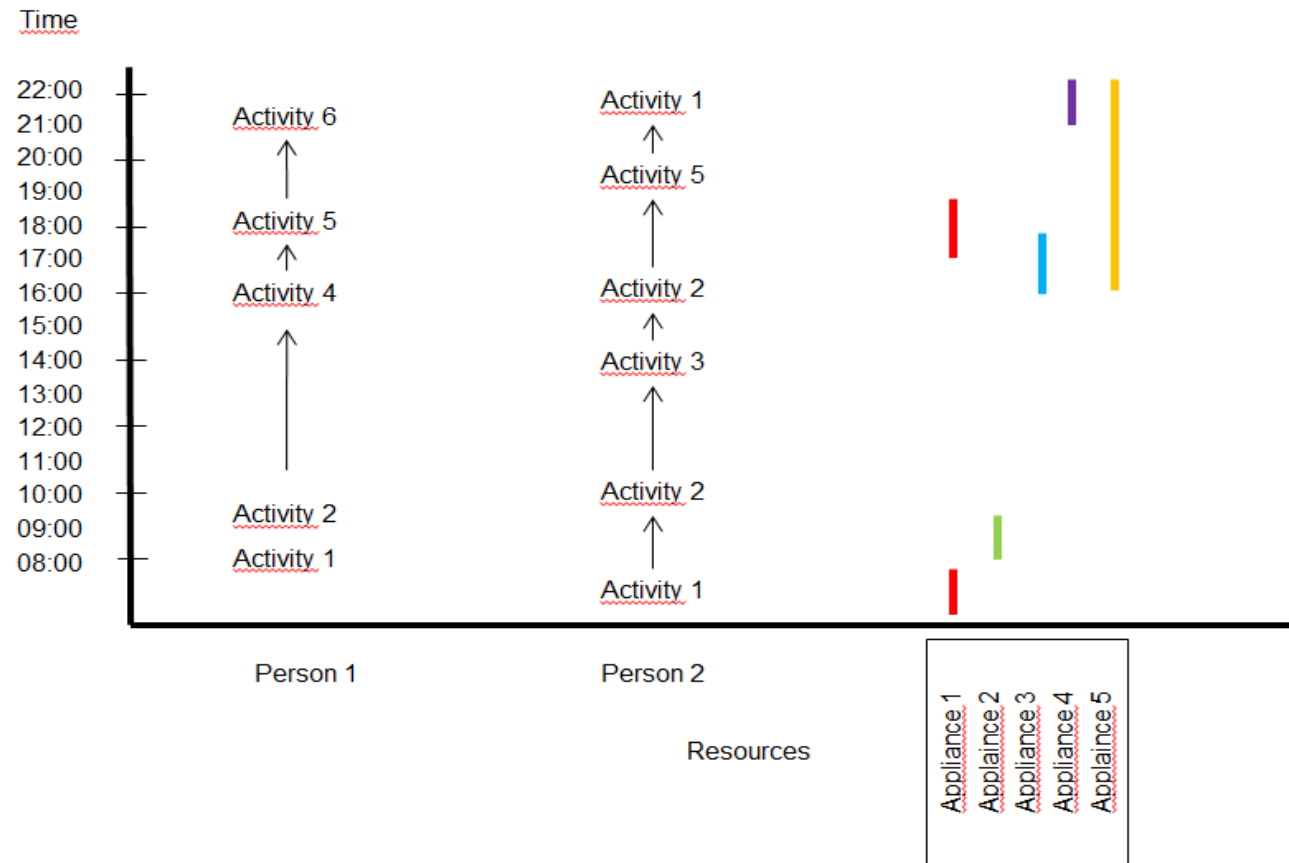
- Qualitative interviews with households living in passive houses that have been built by public housing companies
 - Appliances (included in rent and own appliances)
 - Activities
 - Passive house living

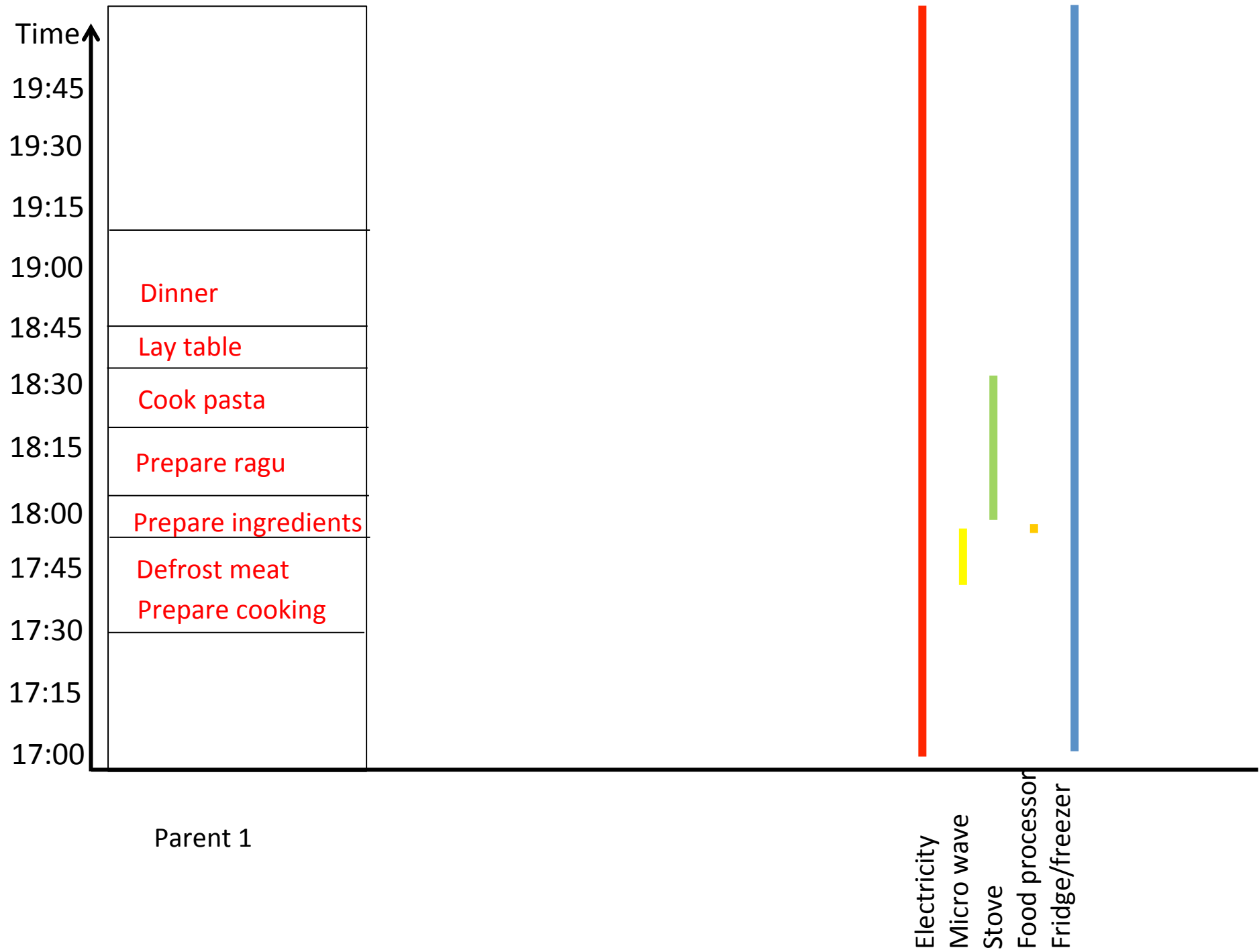
Analysis

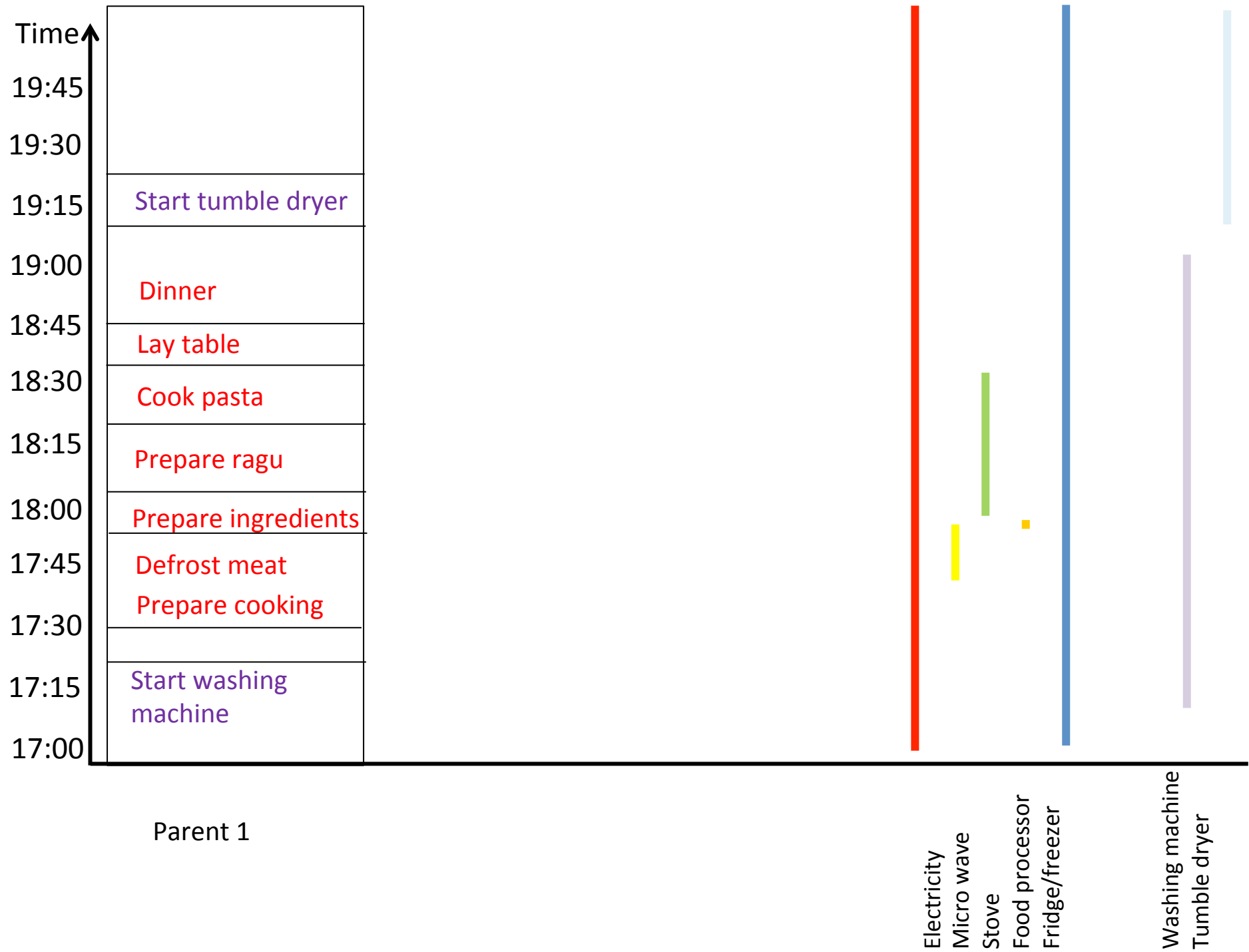
Time geographical concepts:

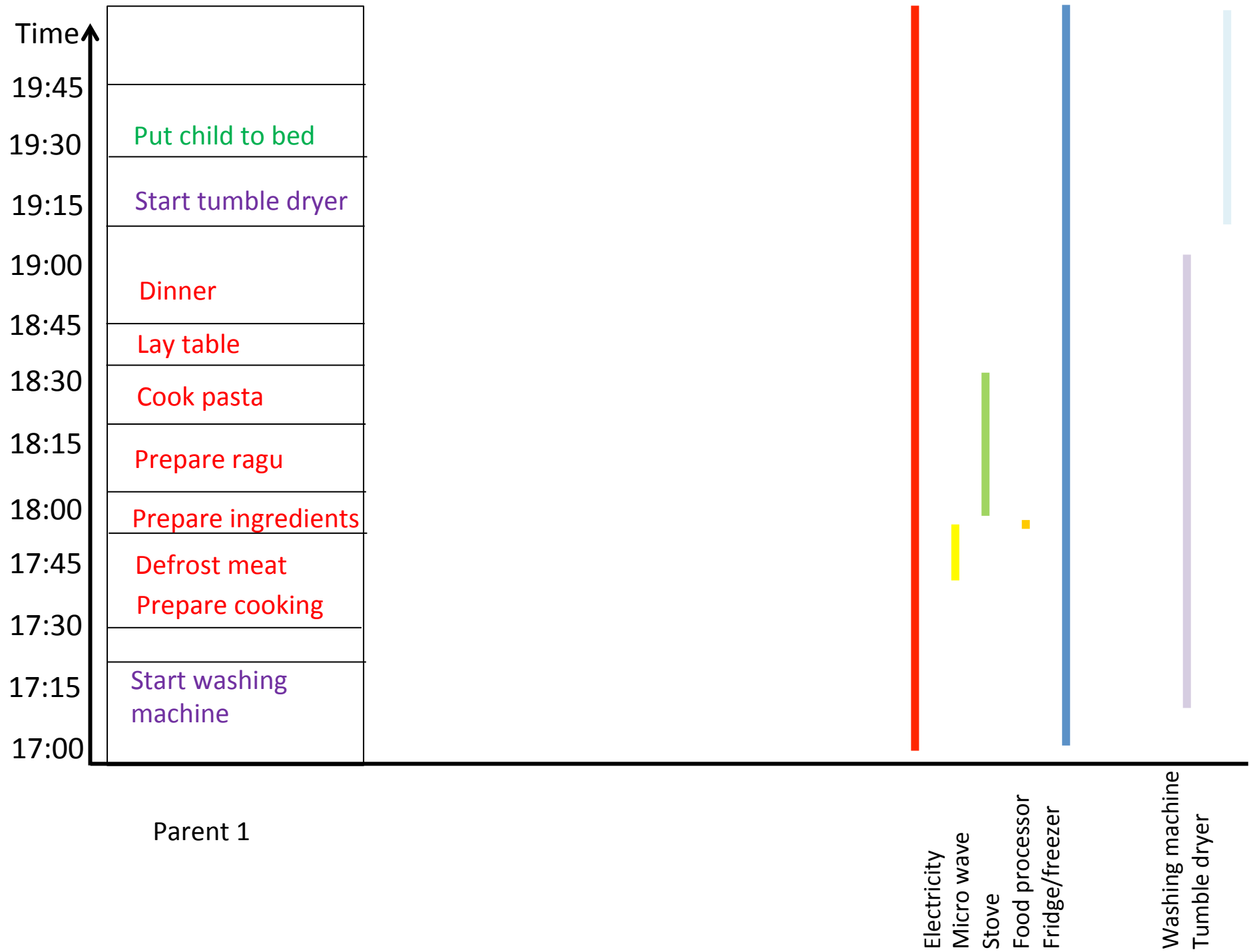
- Time
- Space
- Restrictions
- Possibilities
- Energy orders

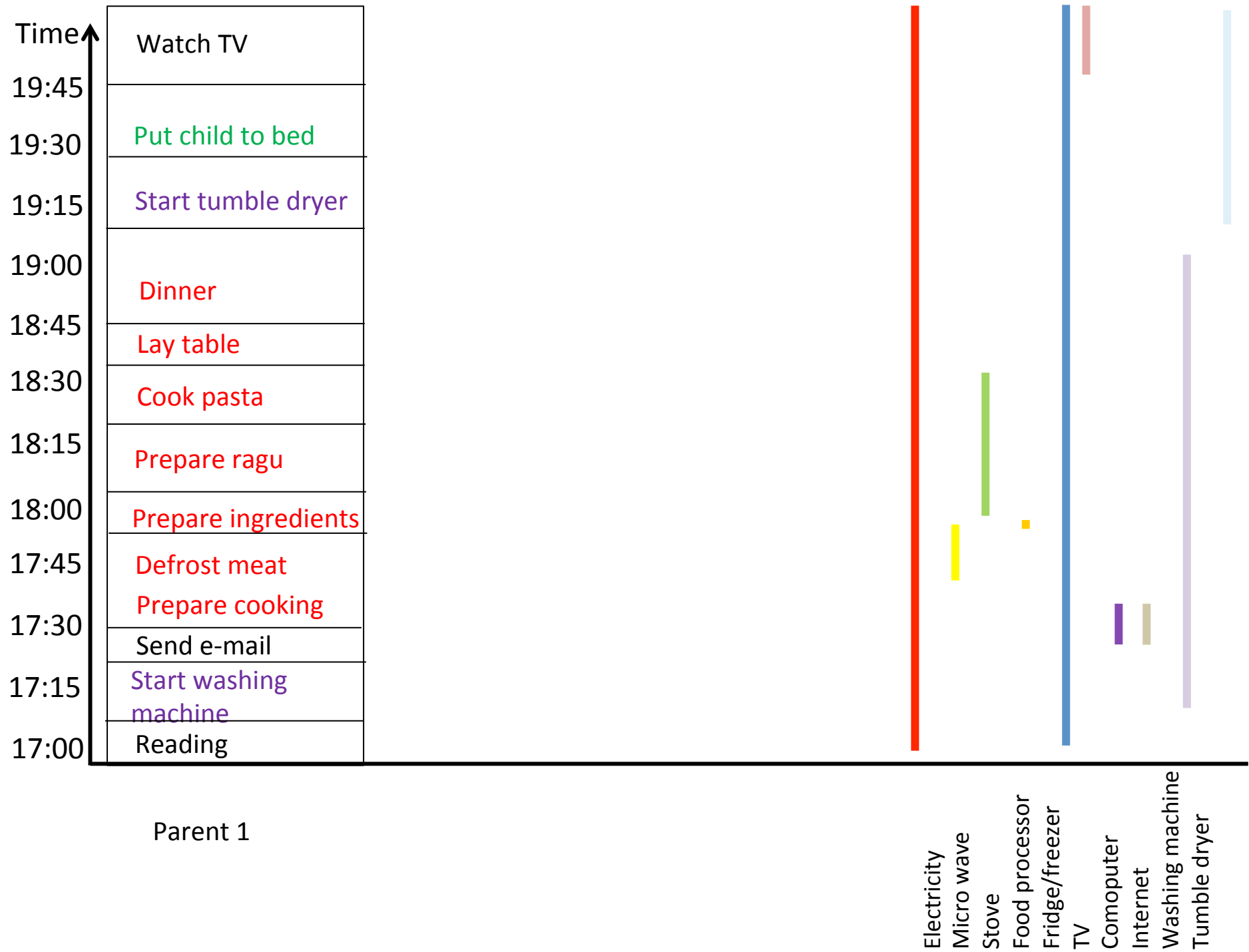
What is an energy order?

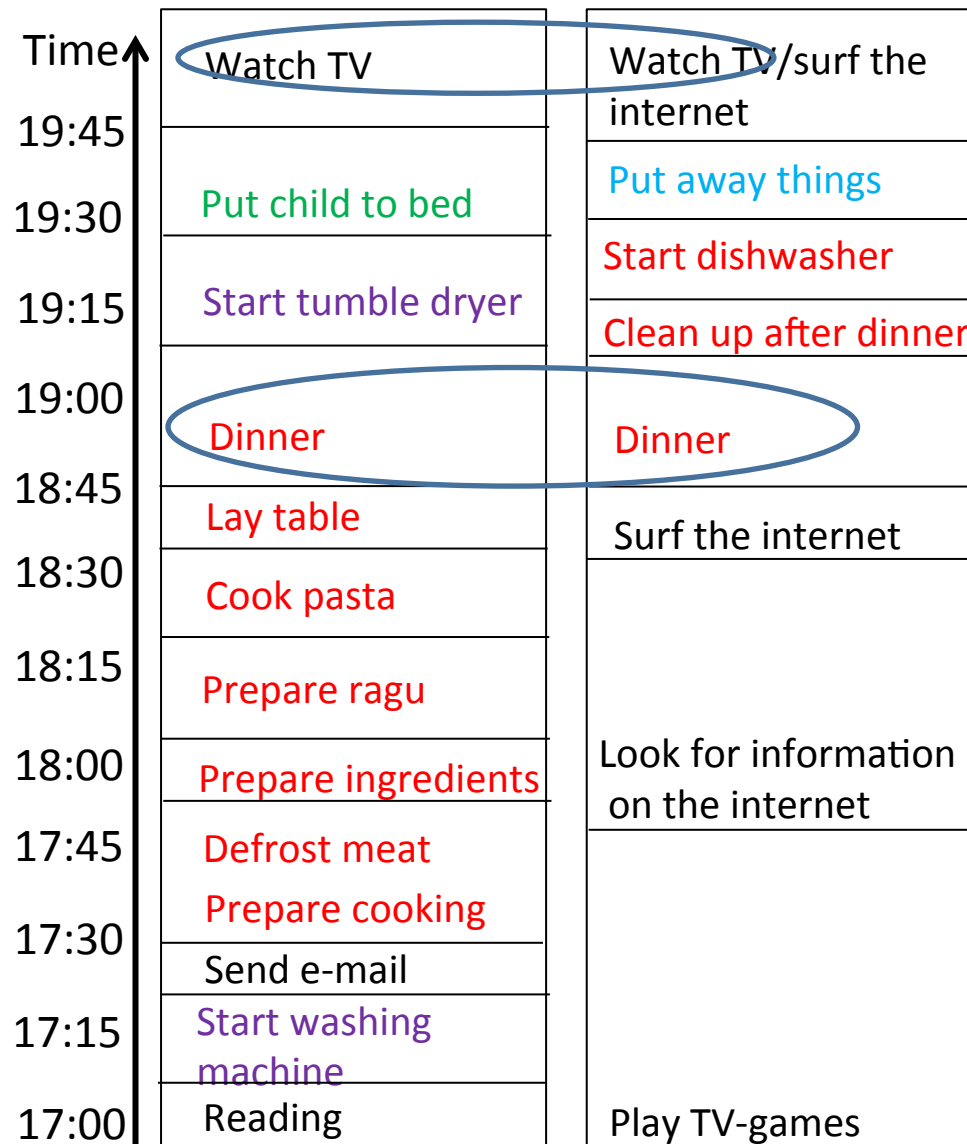






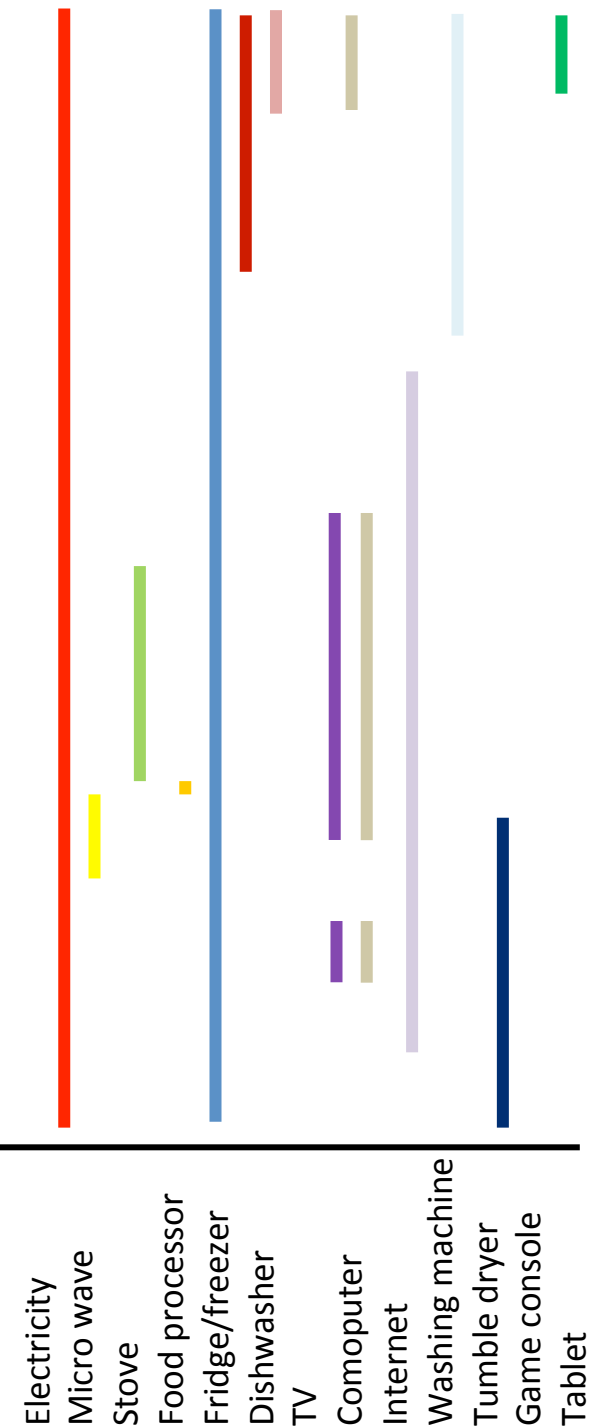


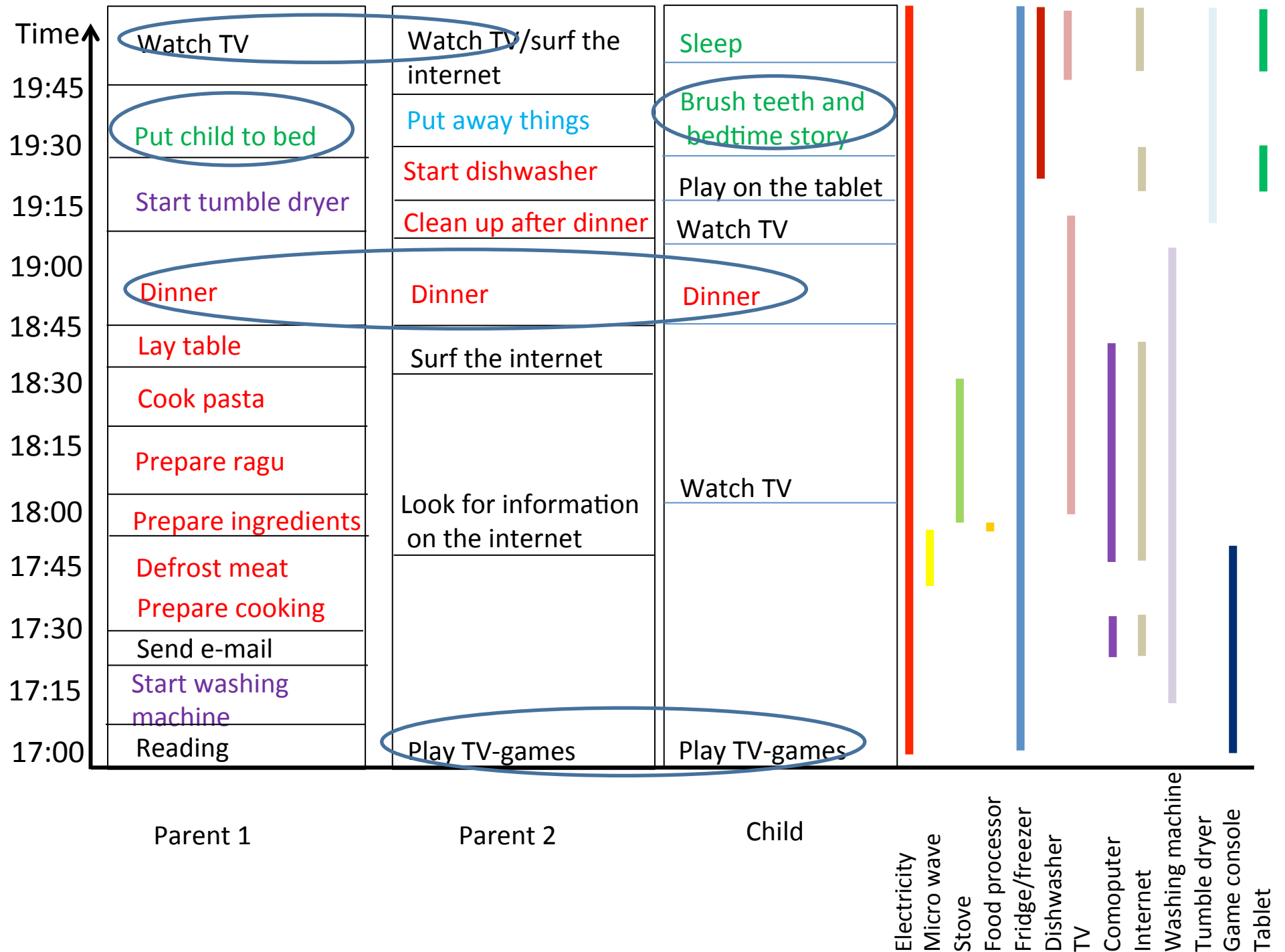


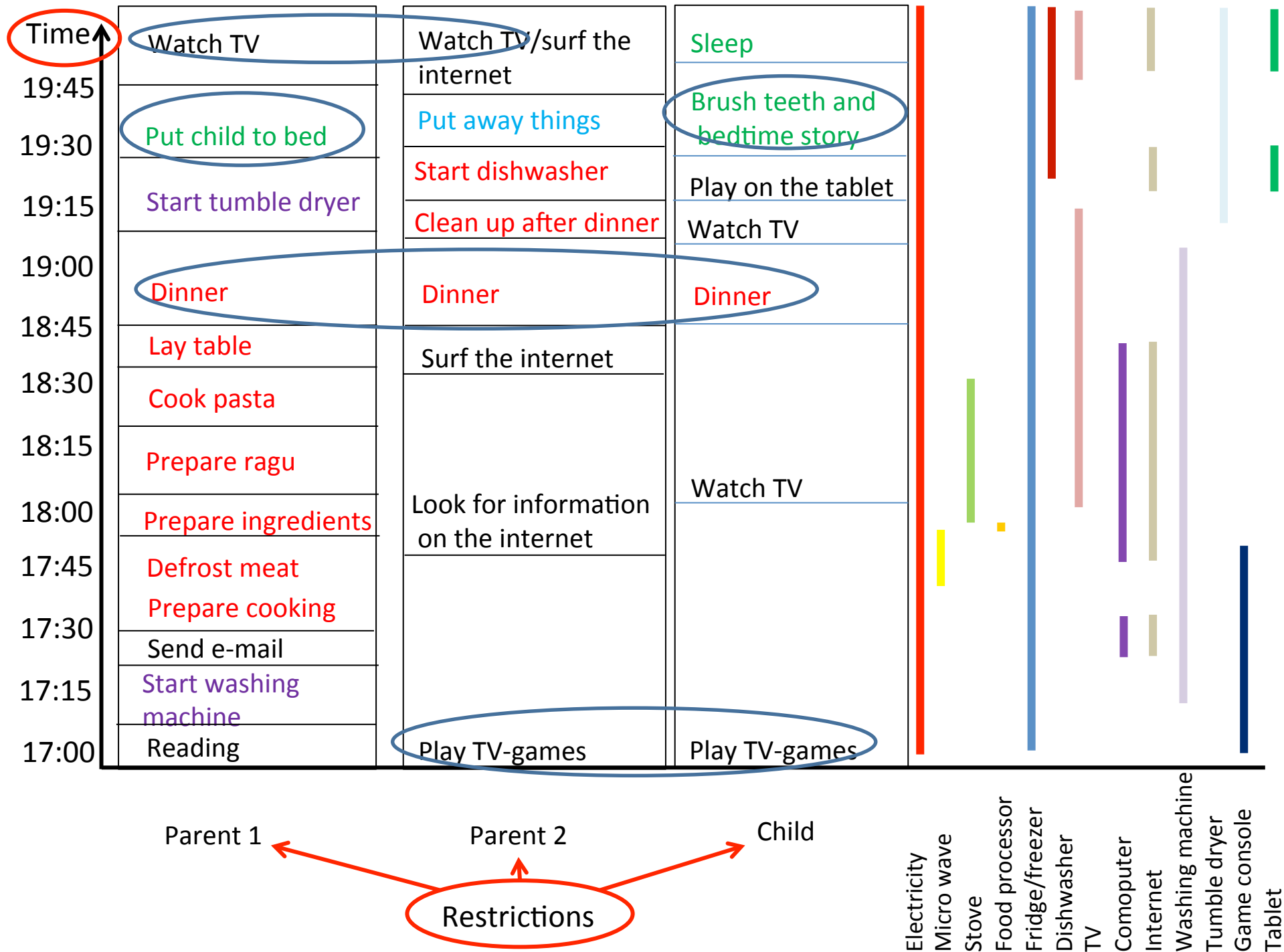


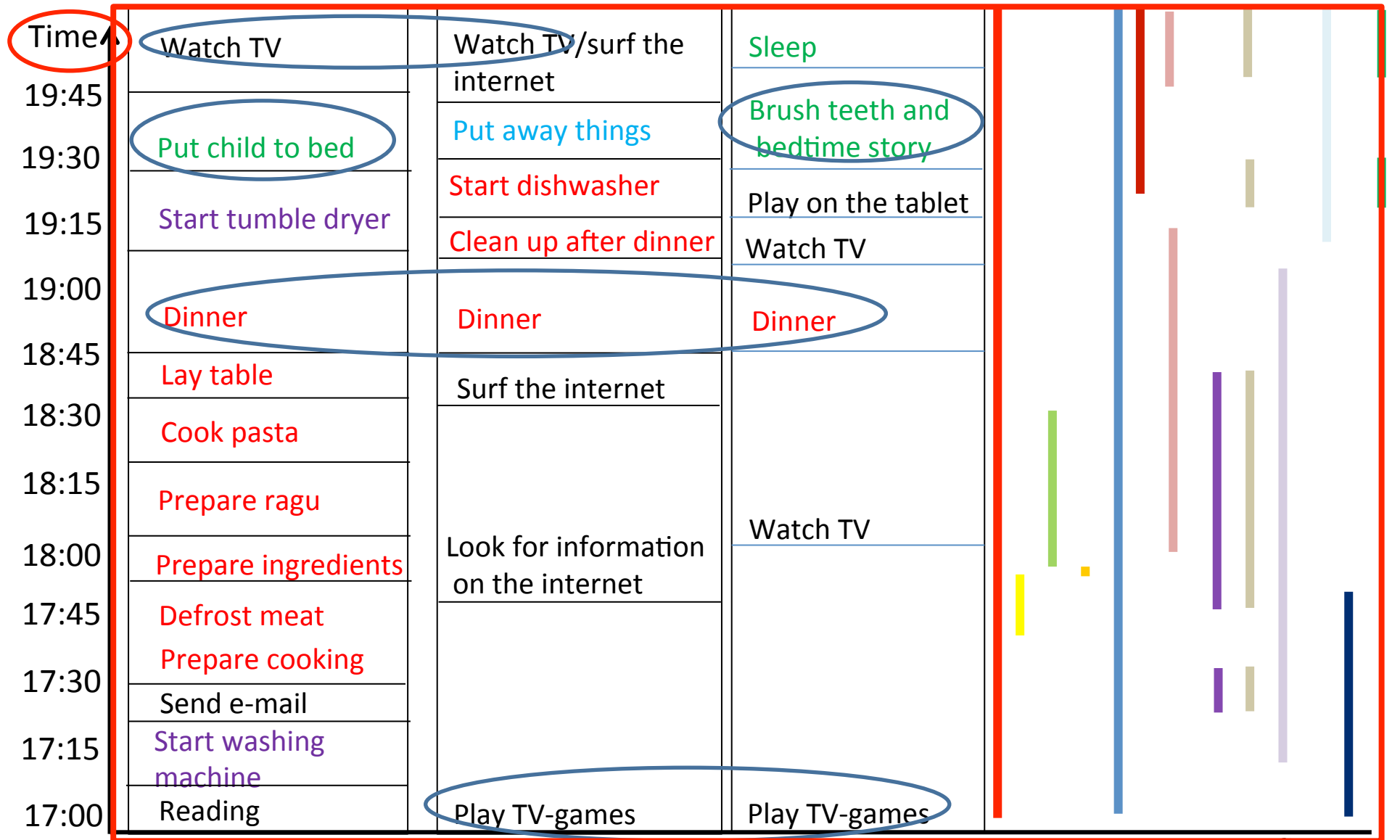
Parent 1

Parent 2









Parent 1

Parent 2

Child

Restrictions

Electricity

Micro wave

Stove

Food processor

Fridge/freezer

Dishwasher

TV

Comoputer

Internet

Washing machine

Tumble dryer

Game console

Tablet

What do energy orders say?

- Who does what?
- When are activities performed?
- What couplings exist between individuals and appliances?
- What does the logical sequence of activities look like?
- What does the structure of activities look like in a particular household?
- What appliances (and other resources) are used in different projects?
- A detailed view of household energy use
- The uniqueness of every household

What can energy orders tell housing companies?

- Low energy housing does not become low energy by itself
- There are no average households, energy use will be formed according to individual needs and restrictions
- Changing household activities should start at the household level, only the households will know what will function in their everyday life
- Material settings should be flexible enough to allow for different ways of doing
- Gather household experiences on energy use in every contact with the households, find out what works and for whom (appliances, storage, space, infrastructure etc.)



Thank you!

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