



DYNAMIX

Decoupling growth from resource use
and its environmental impacts

Reasons for inefficiency

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WP2 OBJECTIVES

- To document efficient and inefficient uses of resources over their life cycle
- To determine the magnitude of the problem
- To analyse the main underlying reasons for inefficiency
- Review of existing literature and data using qualitative and quantitative methods

IDENTIFICATION OF INEFFICIENT USE OF RESOURCES

- What is efficient?
 - “*doing more with less*”
 - $\text{Output/Input} = 100\%$
 - No waste
 - Theoretical physical efficiency?
 - Technologically feasible? Economically feasible? Practically feasible?
 - Depleting natural resources and degrading ecosystem services?
 - When we can't imagine anything better?
 - ...?

IDENTIFICATION OF INEFFICIENT USE OF RESOURCES

- Example: Meat

Protein:
vegetable vs. animal

Origin:
local
vs.
best climatic conditions

Packaging:
minimal
vs.
protection

Slaughter:
manual vs. machine



Waste:
leftovers
vs.
compost

Agriculture

Slaughter

**Food
processing**

Distribution

Retail

**Food
preparation**

Eating

Disposal

Agriculture:
organic vs. intensive

Transport:
truck vs. train

Storage:
fresh vs. frozen

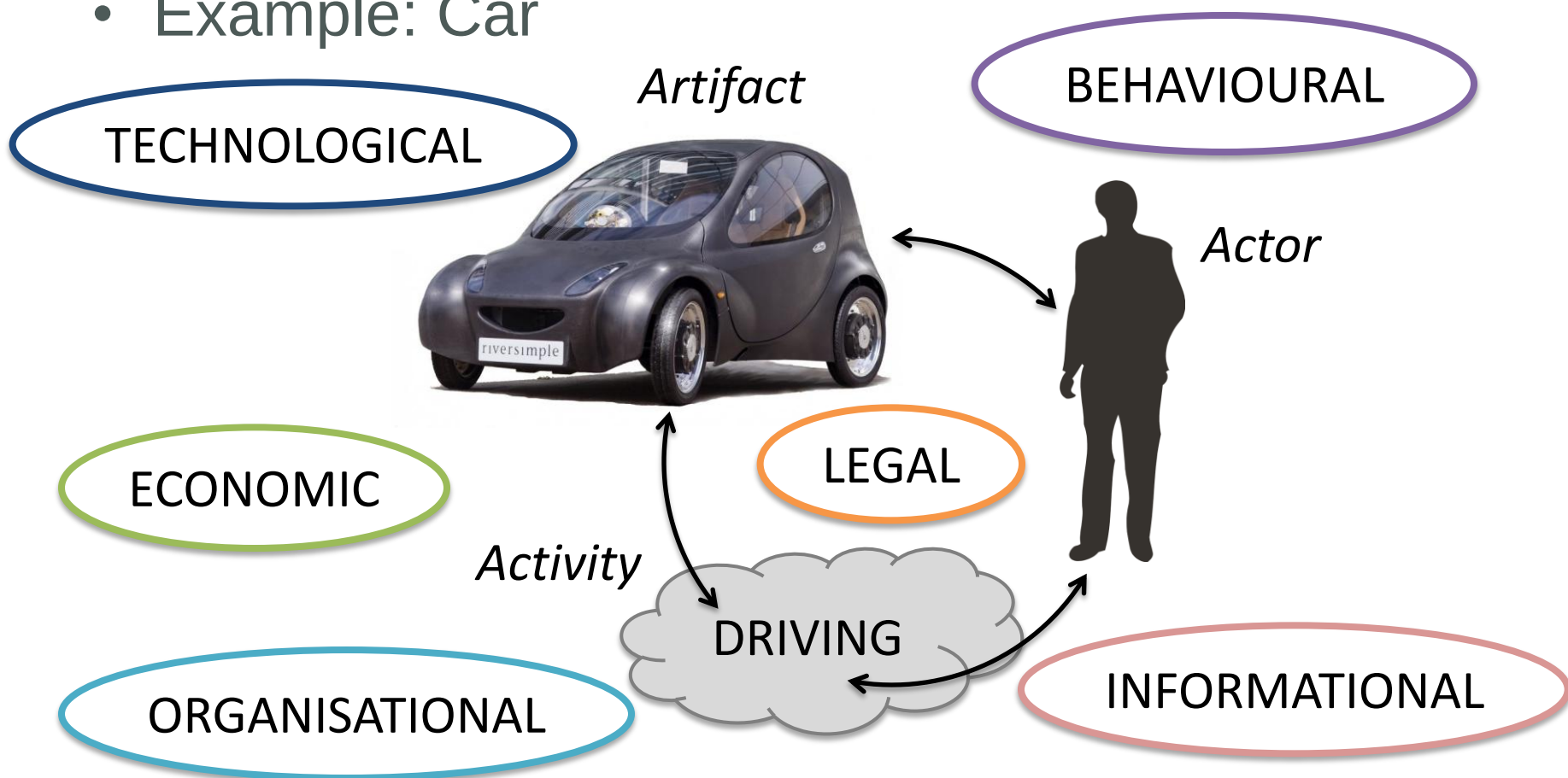
Cooking:
raw vs. slow cook

IDENTIFICATION OF INEFFICIENT USE OF RESOURCES

- Resource perspective
 - Materials
 - Energy
 - Water
 - Land
- Consumption and production perspective
 - Food
 - Transport
 - Buildings

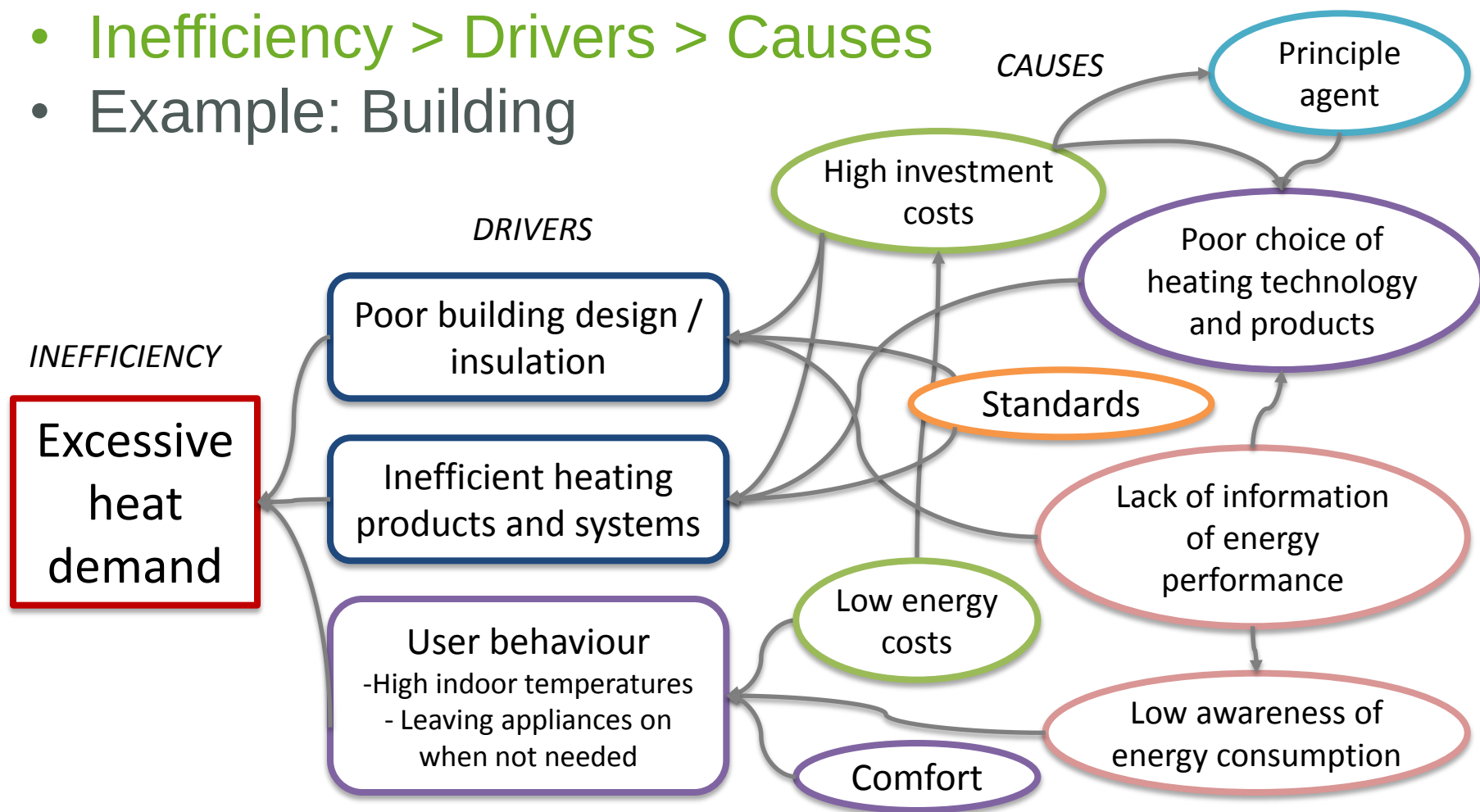
DRIVERS OF INEFFICIENT USE OF RESOURCES

- Example: Car



DRIVERS AND CAUSES OF INEFFICIENT USE OF RESOURCES

- Inefficiency > Drivers > Causes
- Example: Building



CONCLUSION

- Categorisation of key inefficiencies, drivers and causes
- Different perspectives (e.g. resources, sectors, production, consumption) are needed
- The identification of key inefficiencies, drivers and causes tell us what policies and policy mixes should target

DISCUSSION 1

- Reflection on reasons of inefficiency (9:30 – 10:15)
 - Three groups (15 minutes each)
 - Food
 - Transport
 - Buildings
- 1. Five minutes to study the poster and ask questions
- 2. Five minutes to suggest other key inefficiencies, drivers or causes
- 3. Five minutes to vote for the three most important inefficiencies, drivers or causes to address with policy to achieve decoupling

DISCUSSION 2

- Storylines and megatrends of 2050 (9:30 – 10:15)
 - Parallel session on external context scenarios
 - Discussion of the validity, challenges and plausibility of the proposed context scenarios in the DYNAMIX project