Block 1: Introduction to urban infrastructures

The main urban infrastructure systems

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Session overview

In this session we will talk about the basic features of the cities’ main infrastructure systems:

- Transport
- Housing and green infrastructures
- Energy
- Water and wastewater
- Waste
- The communications infrastructures
- Their interrelatedness
Transport

- City road infra.
- Taxi
- Public bus
- Train infra
- Bike
- Agglomeration road infra.
- Suburban train infra
- Station
- Suburban train
- Metro infra
- Metro
- Tram infra
- Tram
- Road infra
- Airport
Housing and green infrastructures

- Vegetalized building
- Gated community
- Green roof
- Tree
- Urban forest
- Urban vegetation
- Biological corridor
- Train infra
- Road infra
- Alley
- Housing
- Park
- Industrial
Energy

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- Back-up generation
- Industrial consumer
- Household consumer
- Self-generation
Drinking and wastewater

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Waste

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- Household consumer
- Industrial consumer
- Collection
- Recycling
- Treatment
- Landfill
- Energy generation (inc. district heating)
Communications
The interrelatedness of all these infrastructures

Tracks (e.g., tram, road)

Tunnels (e.g., train, metro, road)

Surface infrastructures (e.g., roads, buildings, greens)

Cables (e.g., cable TV, fiber, copper, electricity)

Tubes (e.g., water, wastewater, gas)

Surface infrastructures (e.g., roads, buildings, greens)
Conclusion

● We now have a quite detailed understanding of the different urban infrastructures

● Let us, in the next session, look at the entire urban infrastructure system and identify its main dimensions