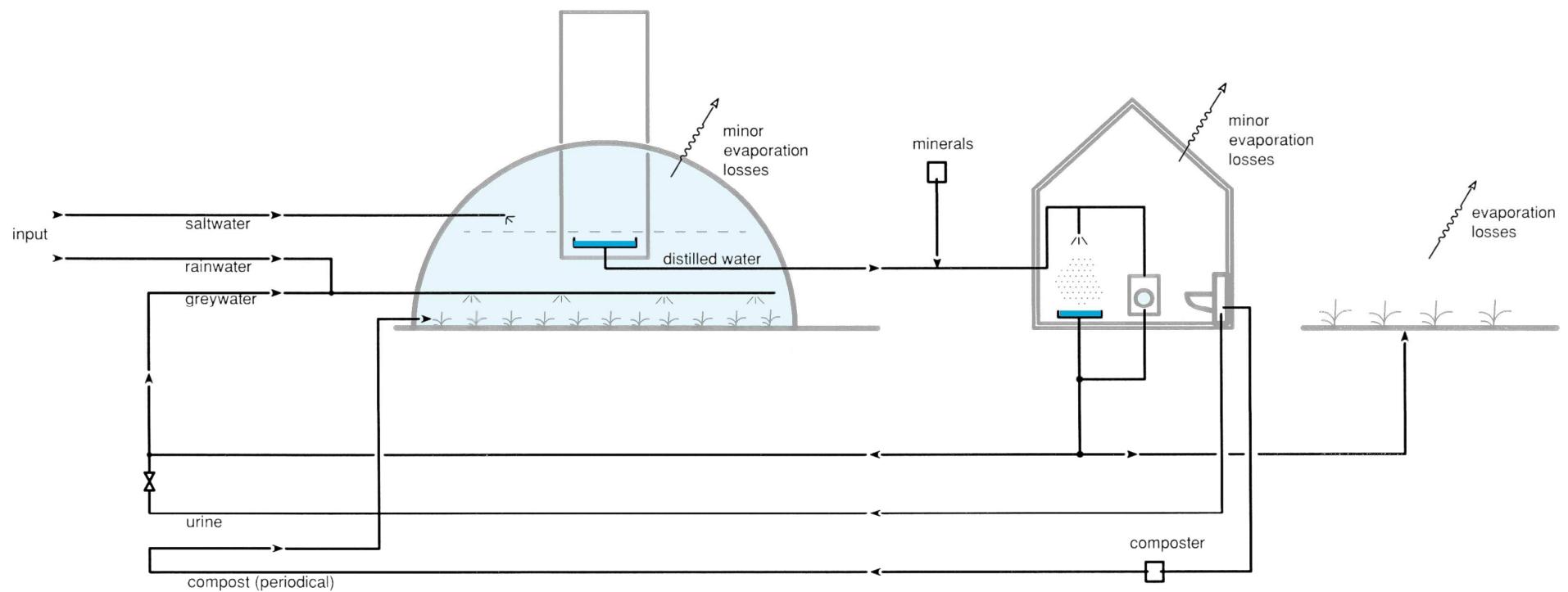
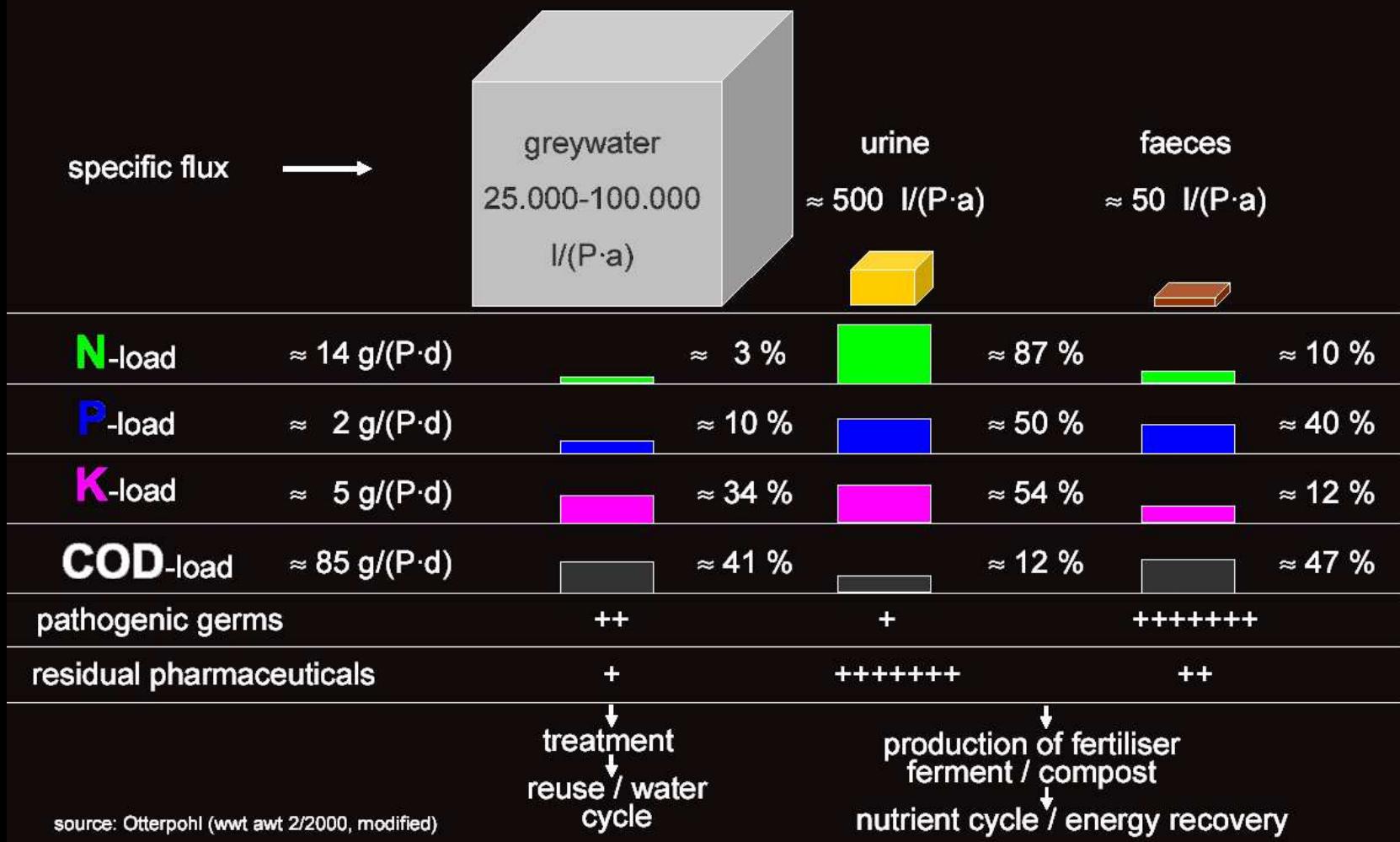


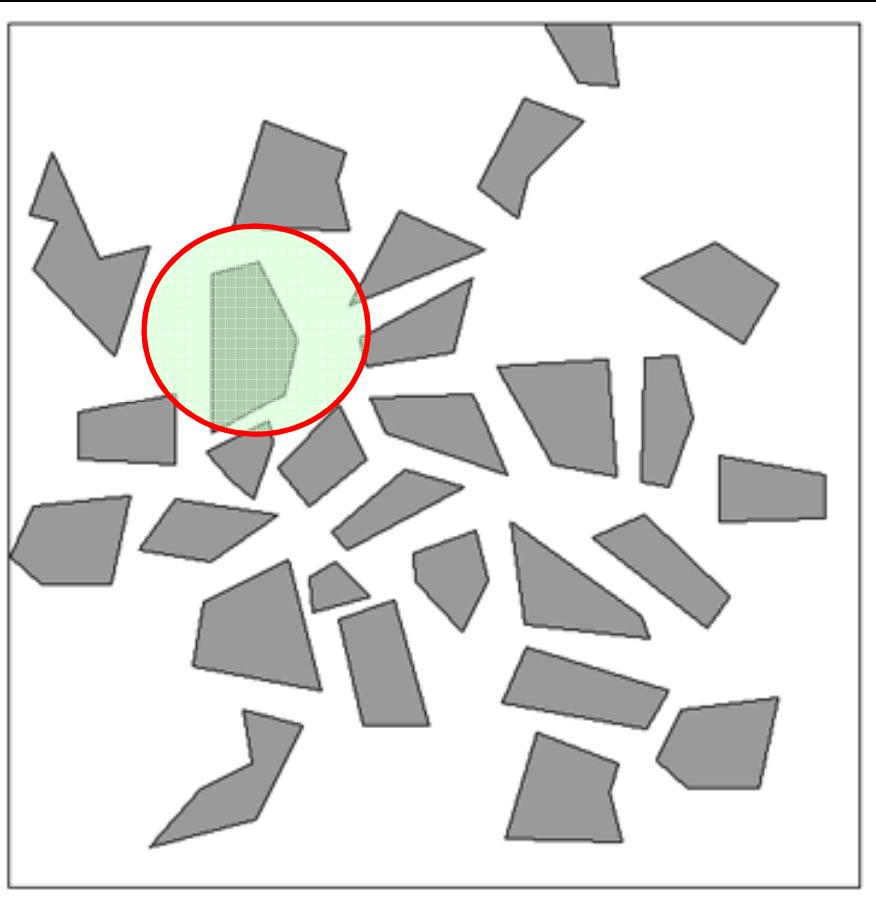
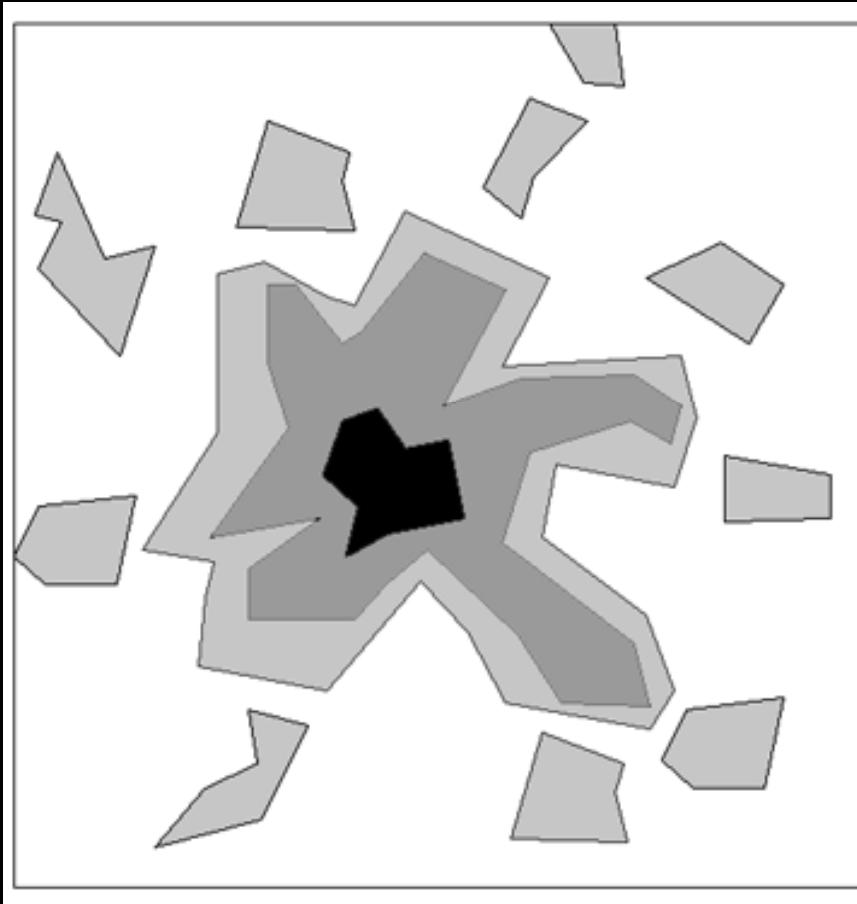


# **1. Urban Water Cycle and Cycle of Plant Nutrients**



## Quality of different wastewater streams







## 2. Solar Energy capture and dissipation

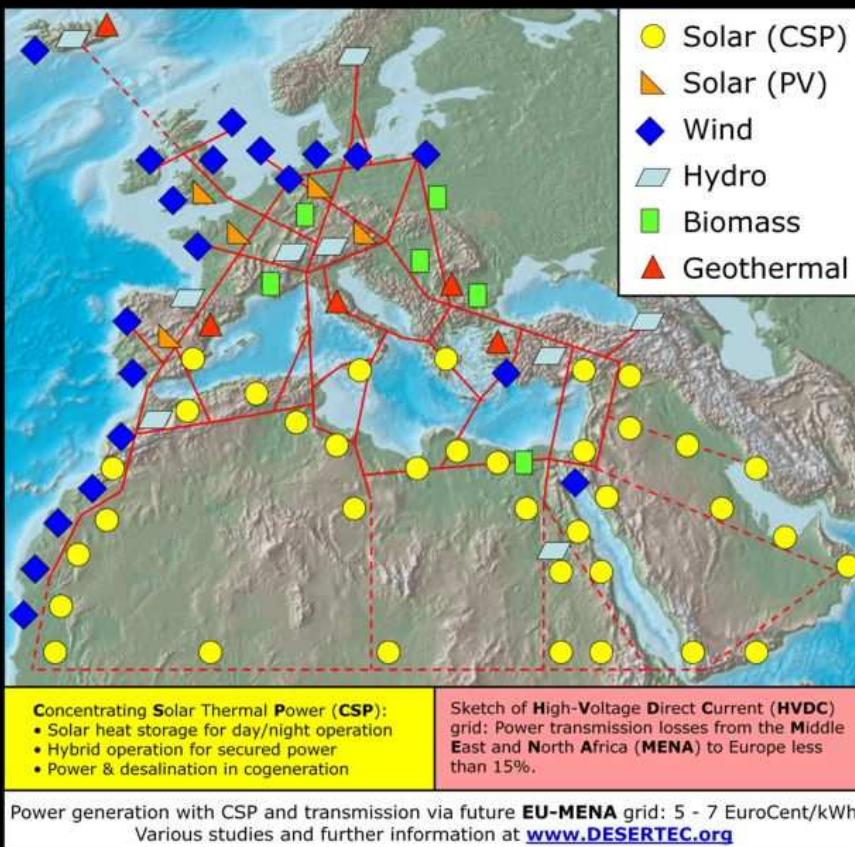


## Capture

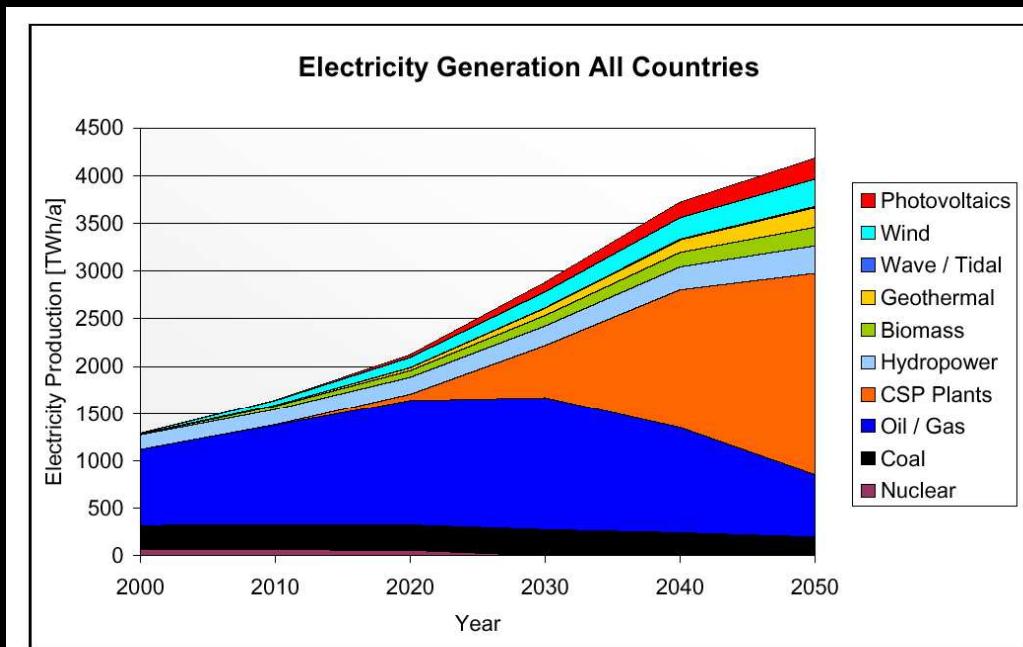
### Cascade of energy transfer

- 300 - 400 °C      Electricity
- 80 - 100 °C      Desiccant Cooling
- 35 - 45°C      Night Heating of Greenhouse  
Greenhouse as solar Still during night  
Forward Osmosis Desalination

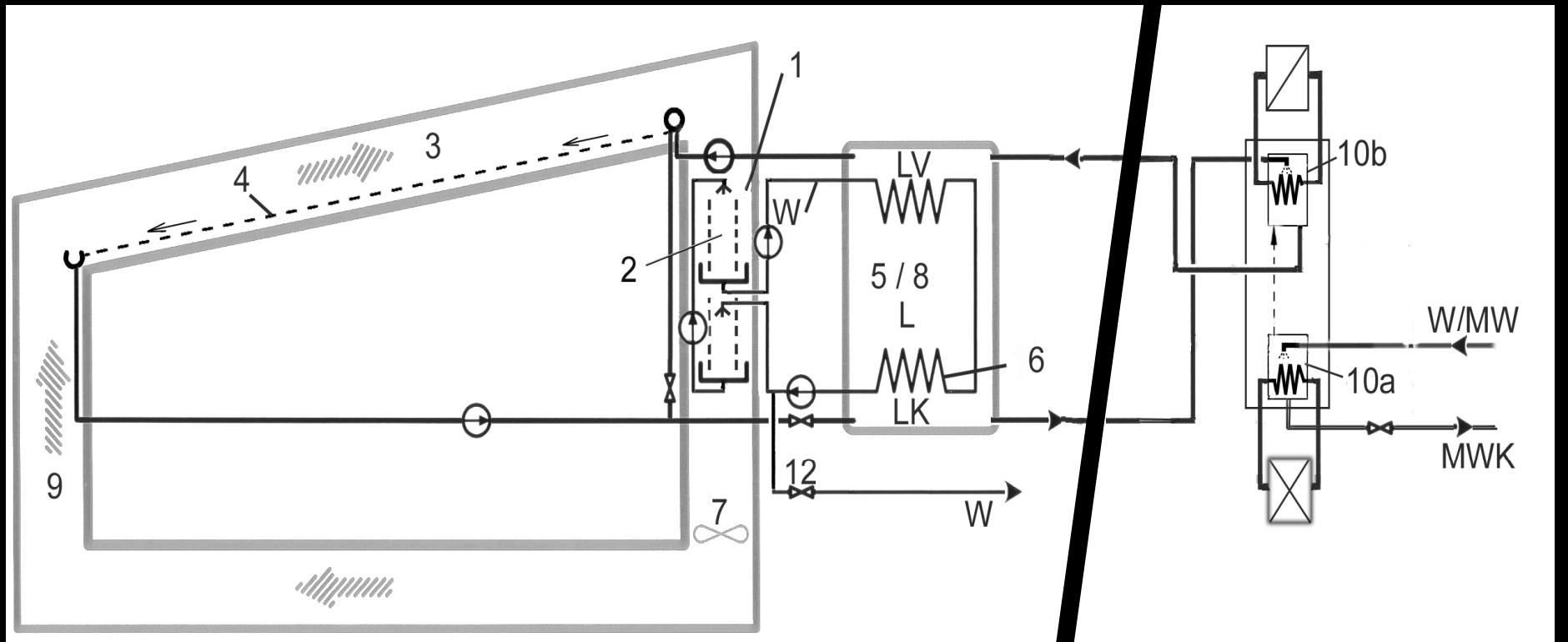




Trans-Mediterranean Renewable Energy Cooperation (TREC)



**Figure 2: Annual electricity demand and generation within the countries analysed in the MED-CSP scenario**



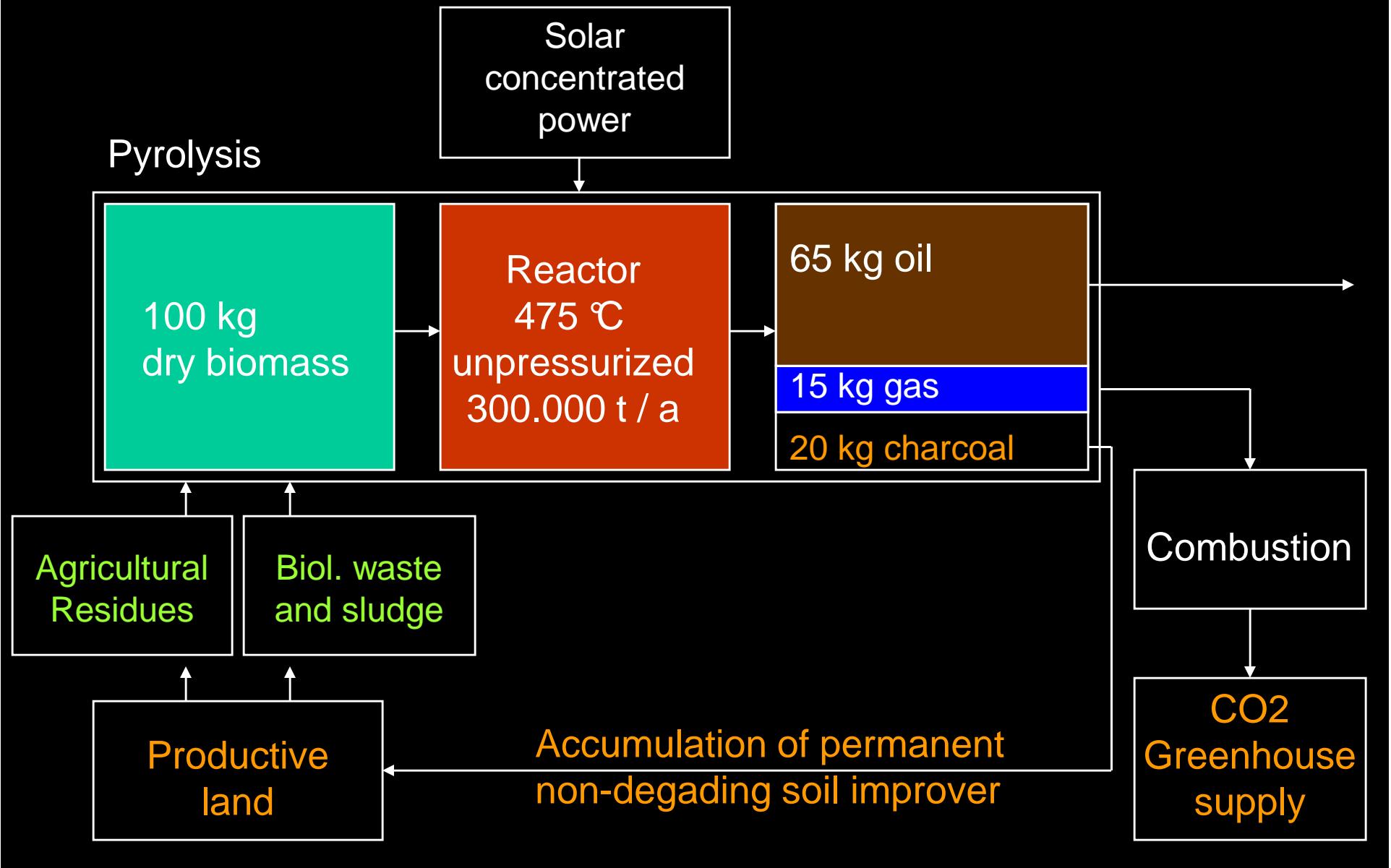
Greenhouse integrated  
regeneration of desiccants

Thermo-chemical  
energy accumulation

Urban desiccant  
cooling

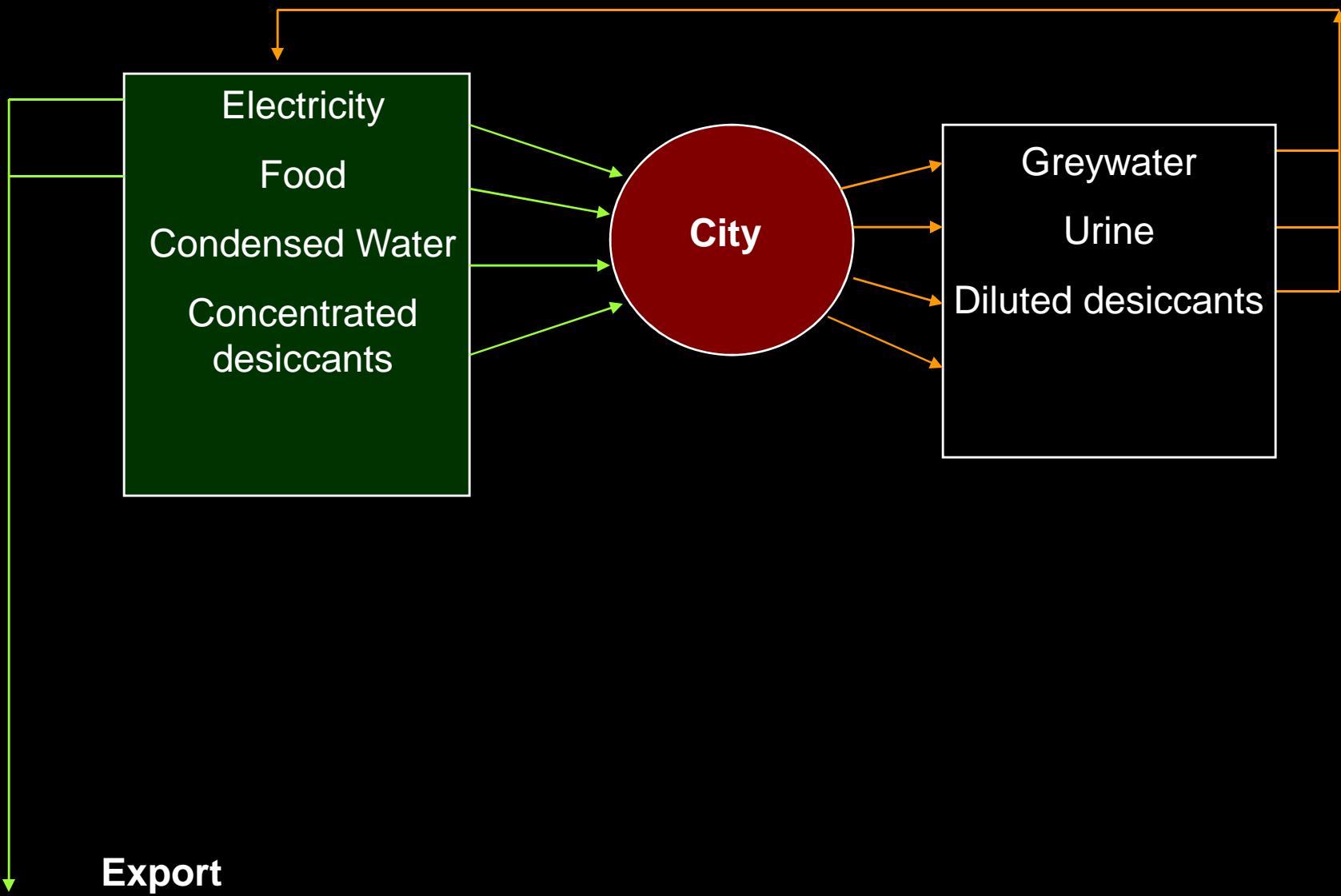
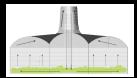


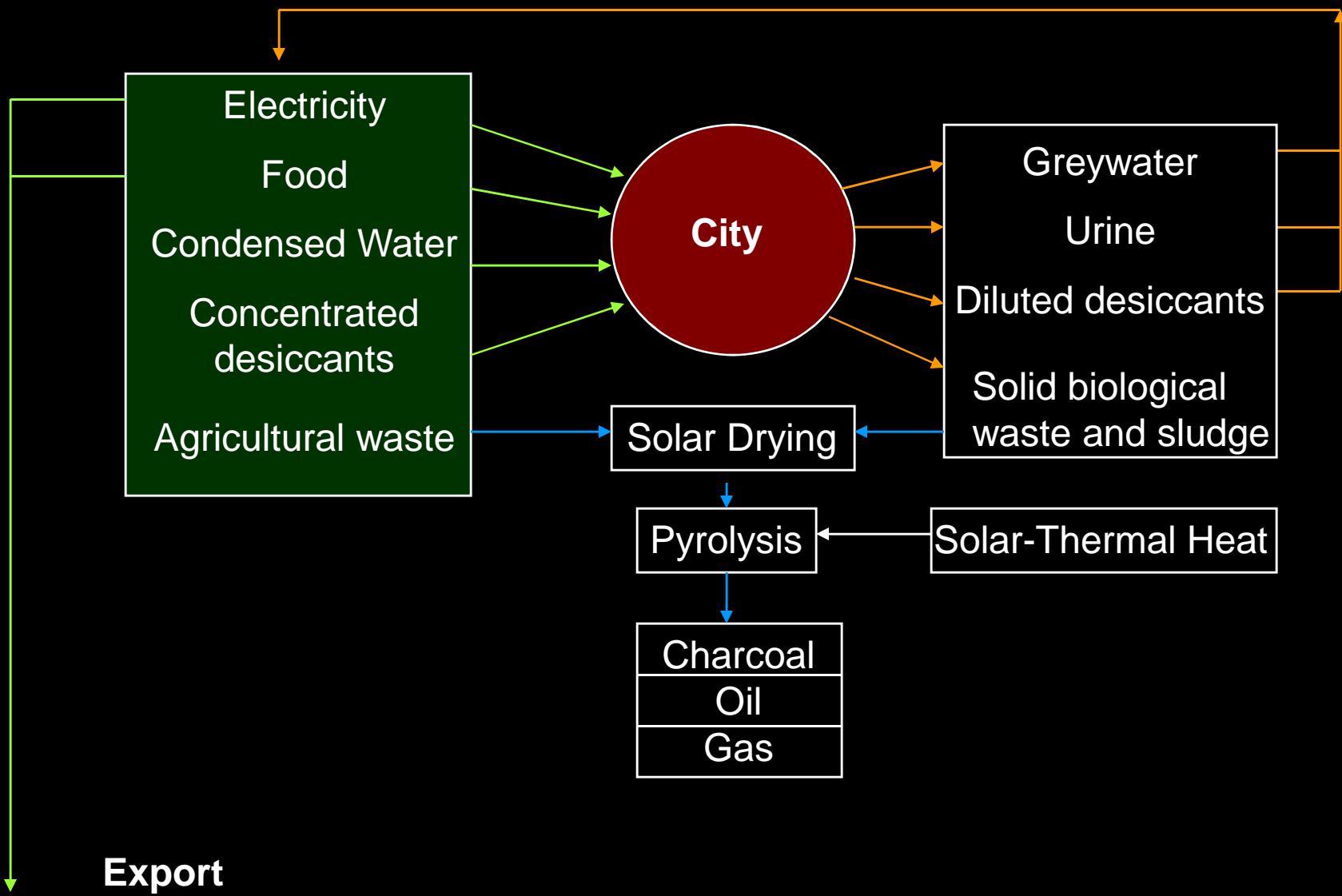
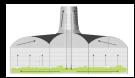
### **3. Carbon capture and accumulation**

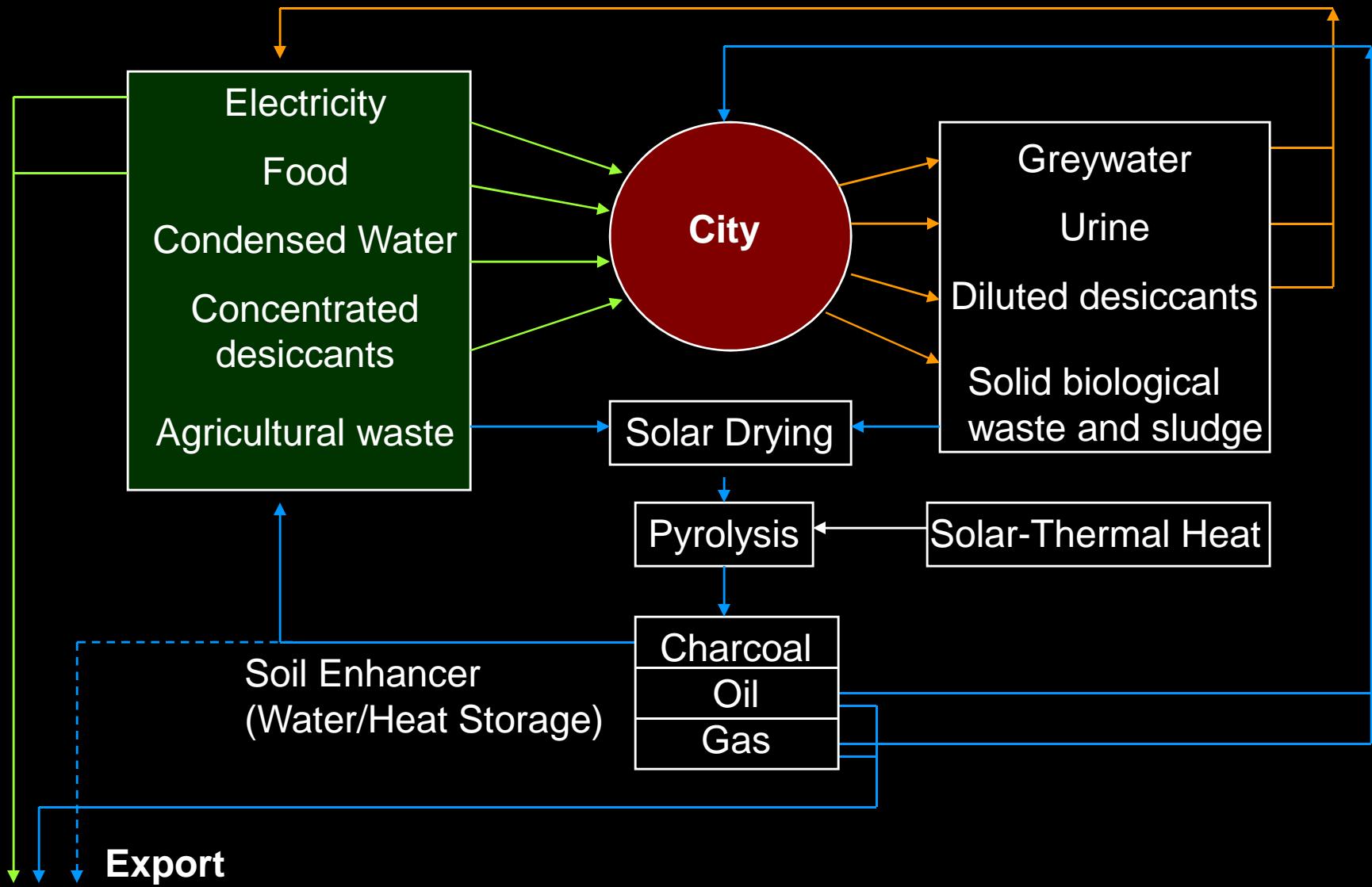
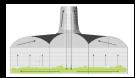


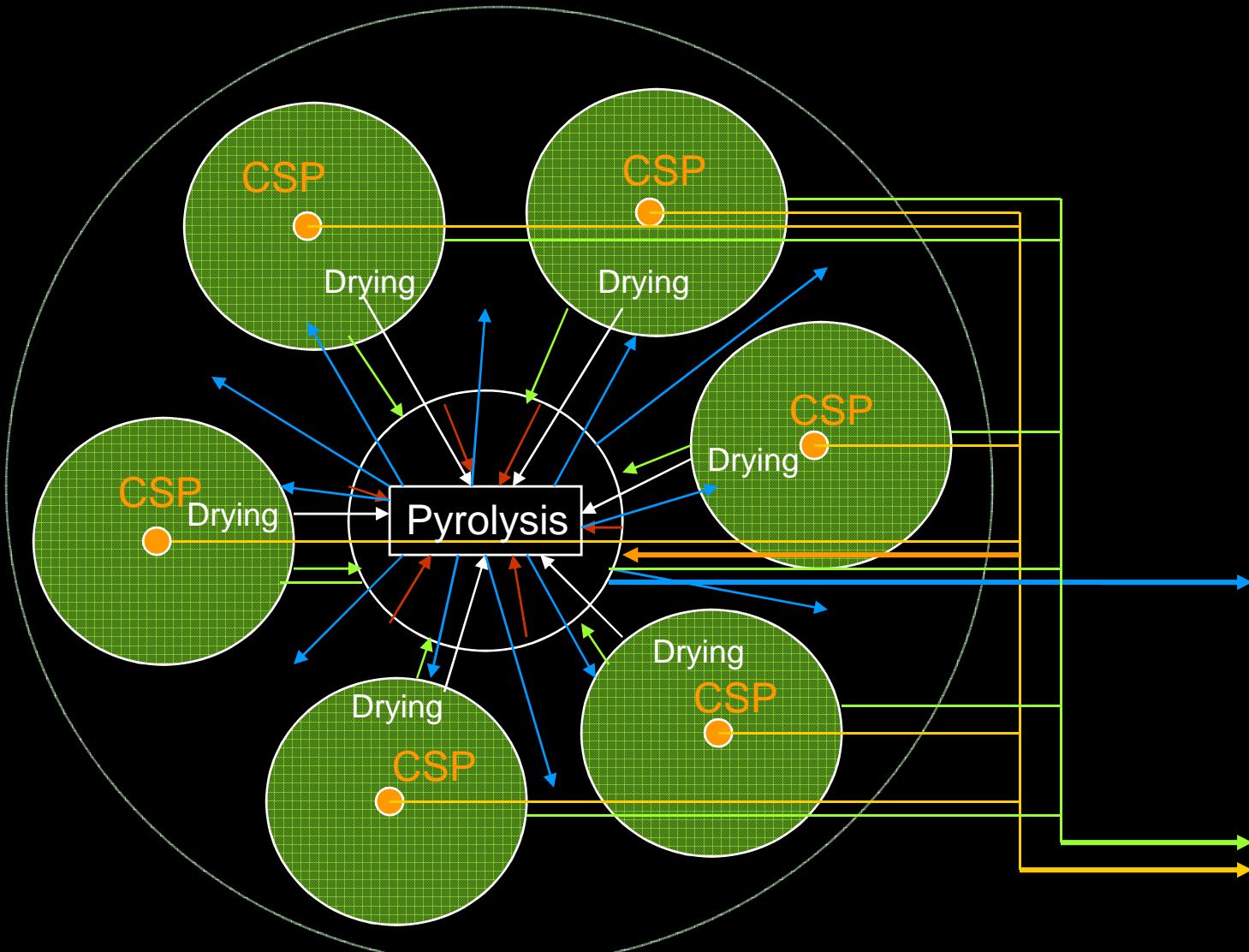


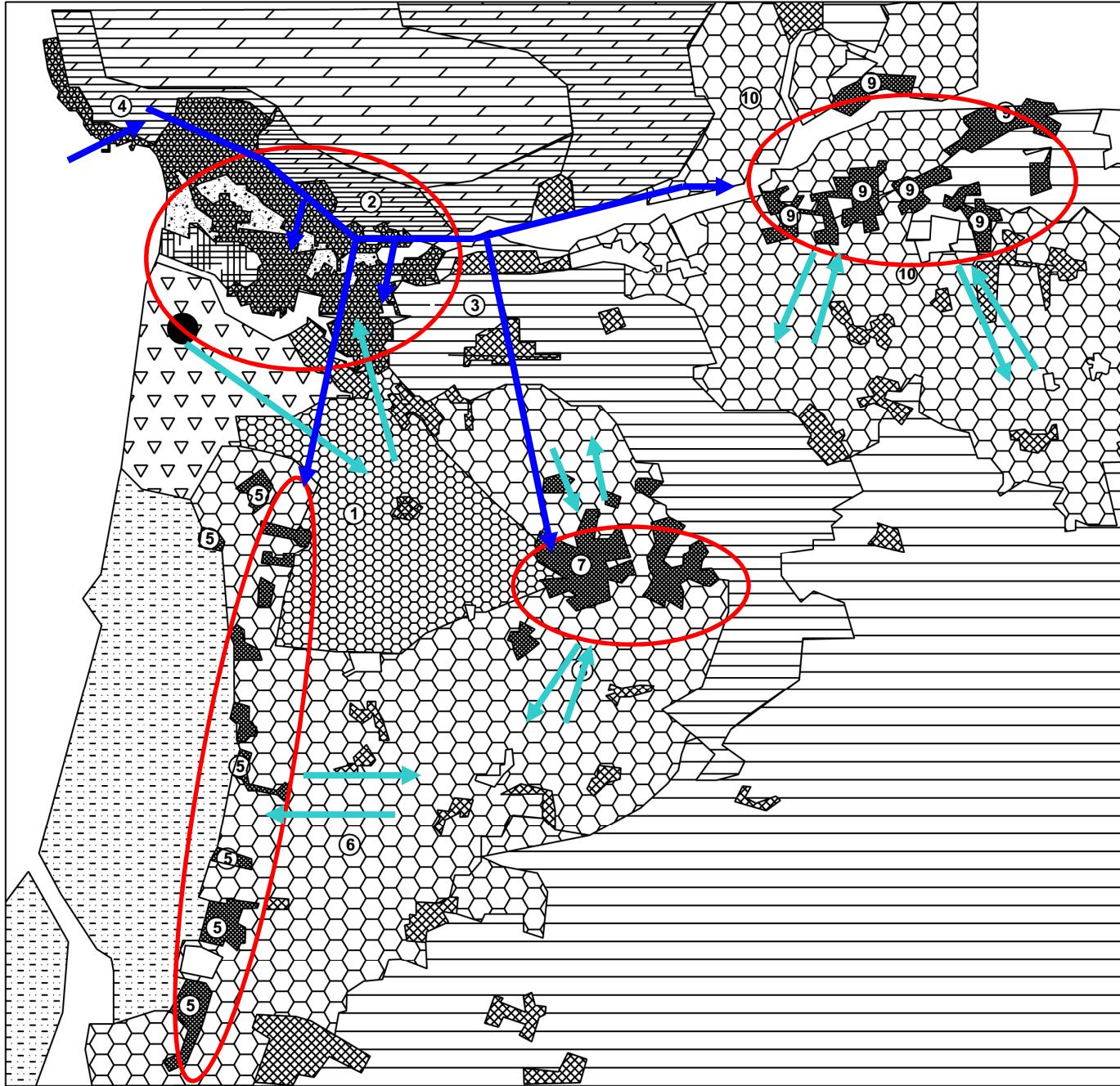
## 4. Urban Synthesis











### Legend

Agadir Urbanisation of high density

Villages of low density

Villages, proposed to form decentral concentrated sub centers around Agadir

Urban green spaces

Golf courses

Forest with embedded waste treatment facilities

Areas of intense agricultural and greenhouse horticultural production

Area proposed for greenhouse integrated waste water treatment for Agadir city

Mountain slope area proposed for open greenhouse wastewater treatment and solar desalination

Cliffy mountain

Area for coastal dune protection

Natural bushland

Arid dryland

# Agadir



**Thank you**

[www.Watergy.info](http://www.Watergy.info)  
[www.Cycler Support.net](http://www.Cycler Support.net)

Cycler Support Implementation Guide  
10/2008