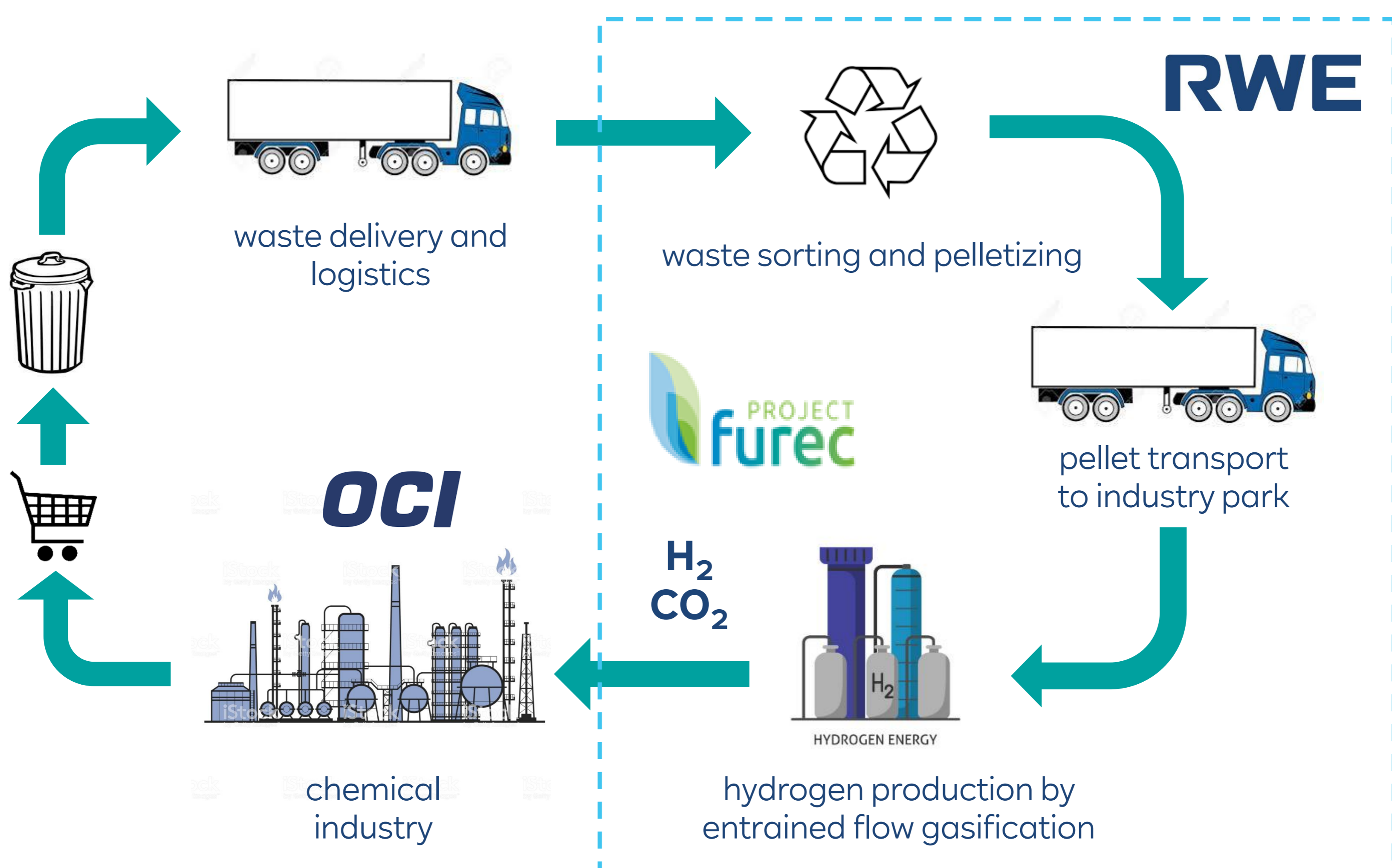


# Innovation path

## Multiple-Hearth-Furnace (MHF)

- **Project FUREC: H<sub>2</sub>-Production from waste at industry park Chemelot at Geleen, NL**
- **Demonstration of torrefaction as thermal waste treatment at Niederaußem**



- **Target:** to produce powdered fuel from waste
- Using torrefaction (low temperature pyrolysis) waste pellets are „roasted“ under absence of oxygen at about 250-300 °C
- MHF-plant Niederaußem, designed and produced as multiple hearth furnace:
  - **Target product „coke“** (embrittled and grindable to fine powder) and
  - flue gas, discharged via unit K of the power plant
- The coke serves as feed for the entrained flow gasification
- Research & Development of RWE Power supports FUREC of RWE Generation:
  - Commissioning and operation of the MHF-plant at Niederaußem
  - Gasification experiments on atmospheric MFC-plant of RWE and pressurized entrained flow reactor of project partners
  - Engineering of sour gas treatment for a commercial unit

