

Pushing a Least Cost Integration of Green Electricity into the European Grid (**GreenNet**)

WP 9: Simulation Software **GreenNet**

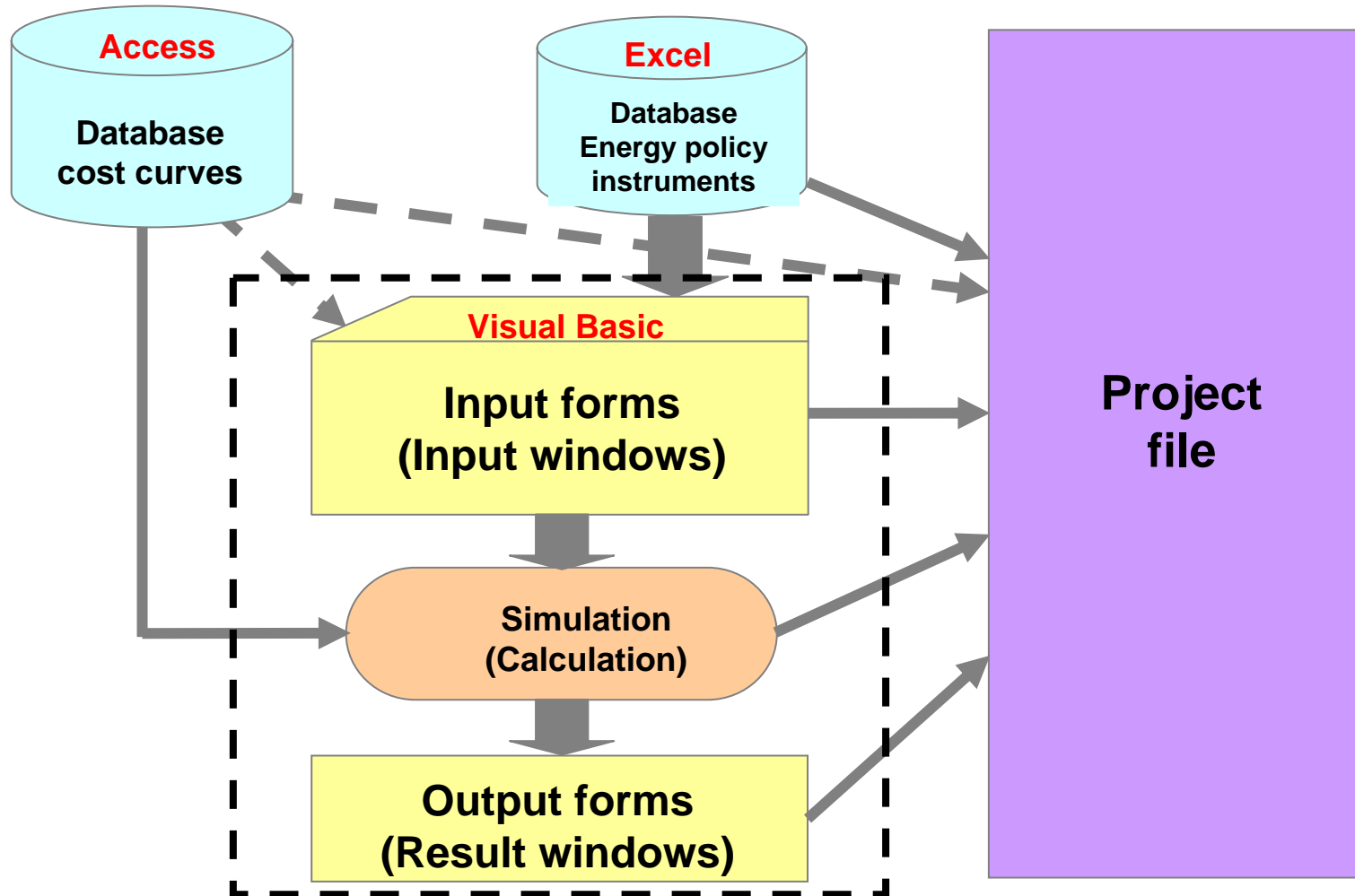
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Cornerstones of the simulation software GreenNet

- **Least Cost Approach**
(Baseline demand (annual / peak) = exogeneous)
- **Analyses / results: annual based (in MWh), peak load hour (in MW)**
- **Supply-Side: Potential & Cost of conventional & RES-E generation**
- **Grid connection / extension cost**
- **System operation cost (w/o versus w/ storage): Capacity & balancing cost**
- **Demand Side: Potential & Cost of energy efficiency**
- **Energy Policy Instruments: feed-in tariffs, tradeable certificates, tendering systems, subsidies, tax incentives, others**
- **Simulation Period: 2002 – 20xx (maximum 2020)**
- **Countries: EU15 + 4 NAS minimum (CH, N & remaining 6 NAS desirable)**

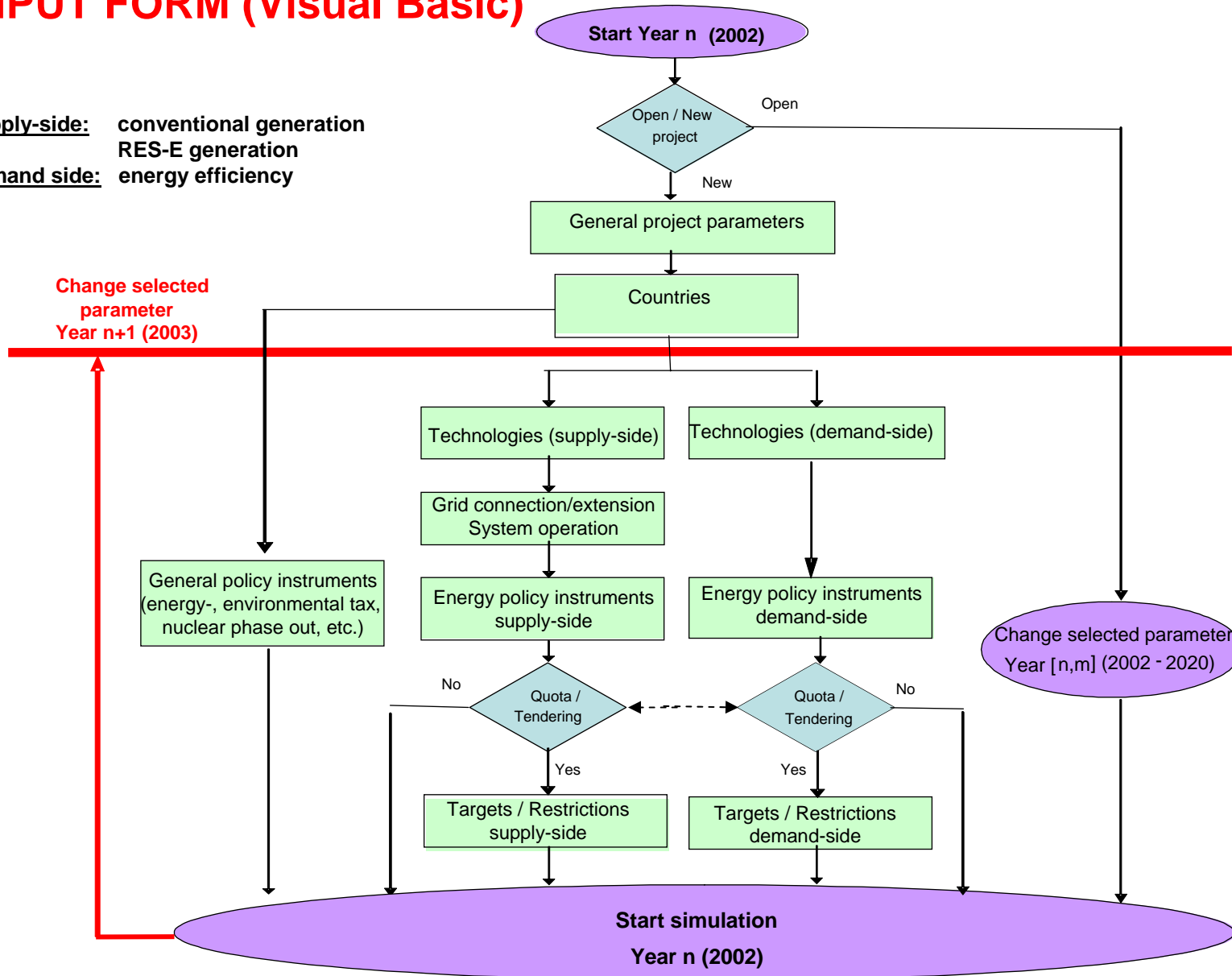
GENERAL STRUCTURE



INPUT FORM (Visual Basic)

supply-side: conventional generation
RES-E generation

demand side: energy efficiency



SIMULATION

Start simulation
Year n+1 (2003)

