

Renewables and Energy Efficiency/Conservation in Egypt Current (2023) & possible future

Seville, Spain

7 March 2023

FEATURES, CHALLENGES AND POTENTIAL DEVELOPMENTS

- *EPC*
- *BOO*
- *FiT*
- *IPP*
- *Net metering*
- *Quota!*



- *Quota*
- *The only supplier*
- *Environmental obligations*
- *NWFE*
- *H2*

Pushing schemes



Pulling schemes

- *Constitution*
- *Energy strategy*
- *RE laws*
- *Electricity law*

ENERGY CONSERVATION & IMPROVING ENERGY EFFICIENCY

On the supply side

- Higher generation efficiency (Combined Cycle, etc.)
- Moving to NG
- Moving RE

On the end user side

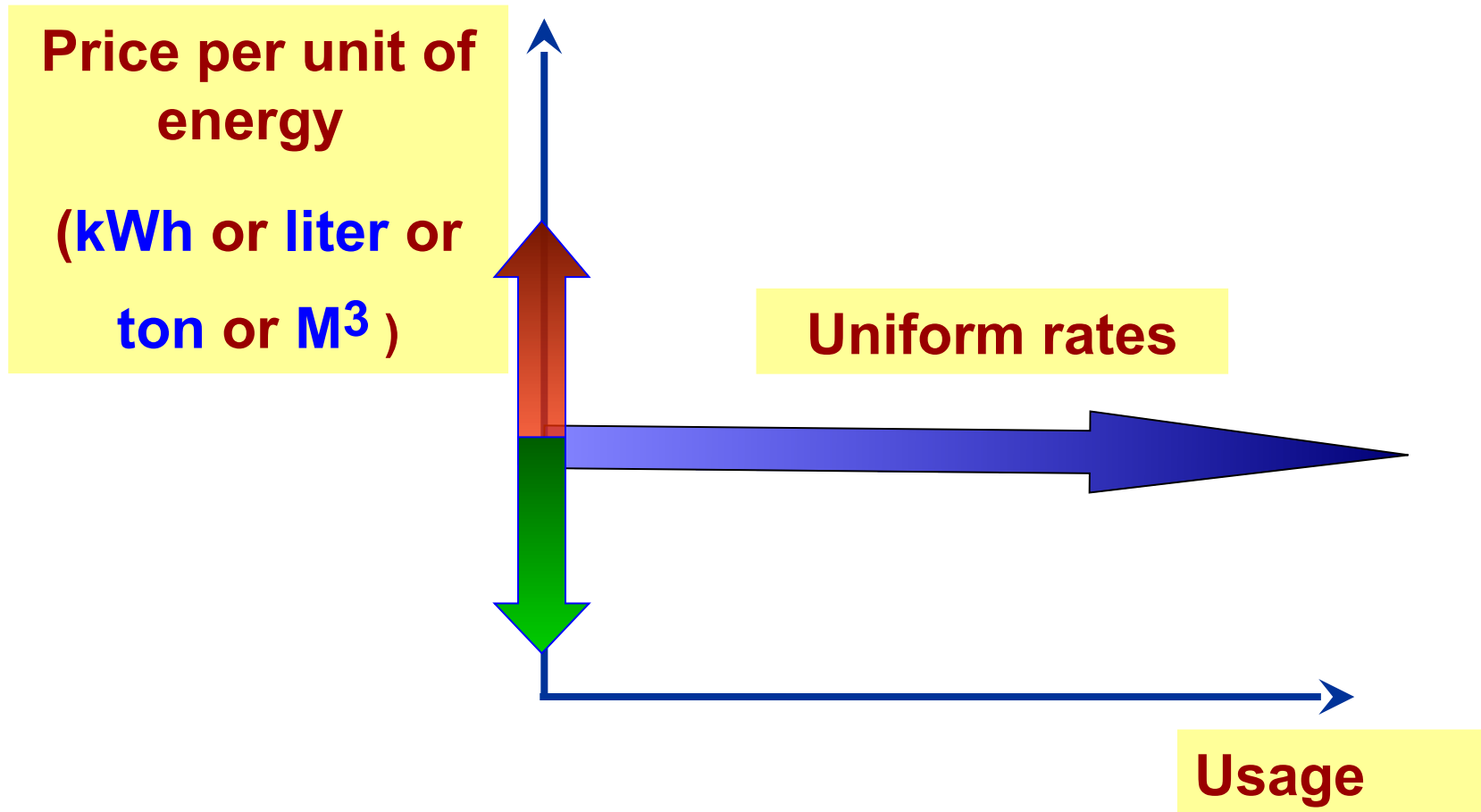
- Energy managers and audits
- Tariffs (fossil fuels and electricity)
 - Increasing block rates
 - Max demand charges
 - etc.

Tariffs

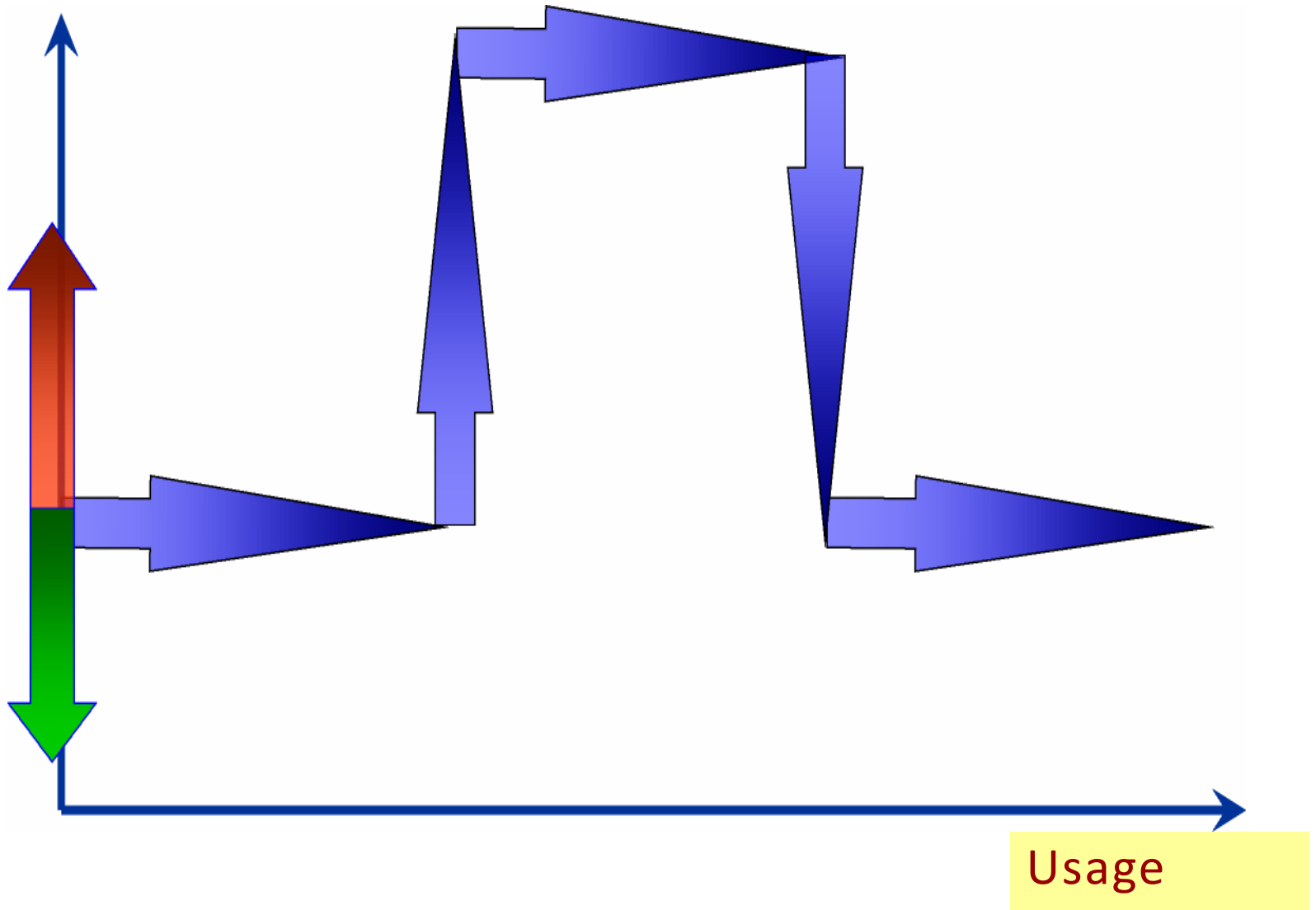
Cost of service and tariffs

- Uniform rates (past & current)
- **inclining** block rates (past & current)
- Declining block rates (past)

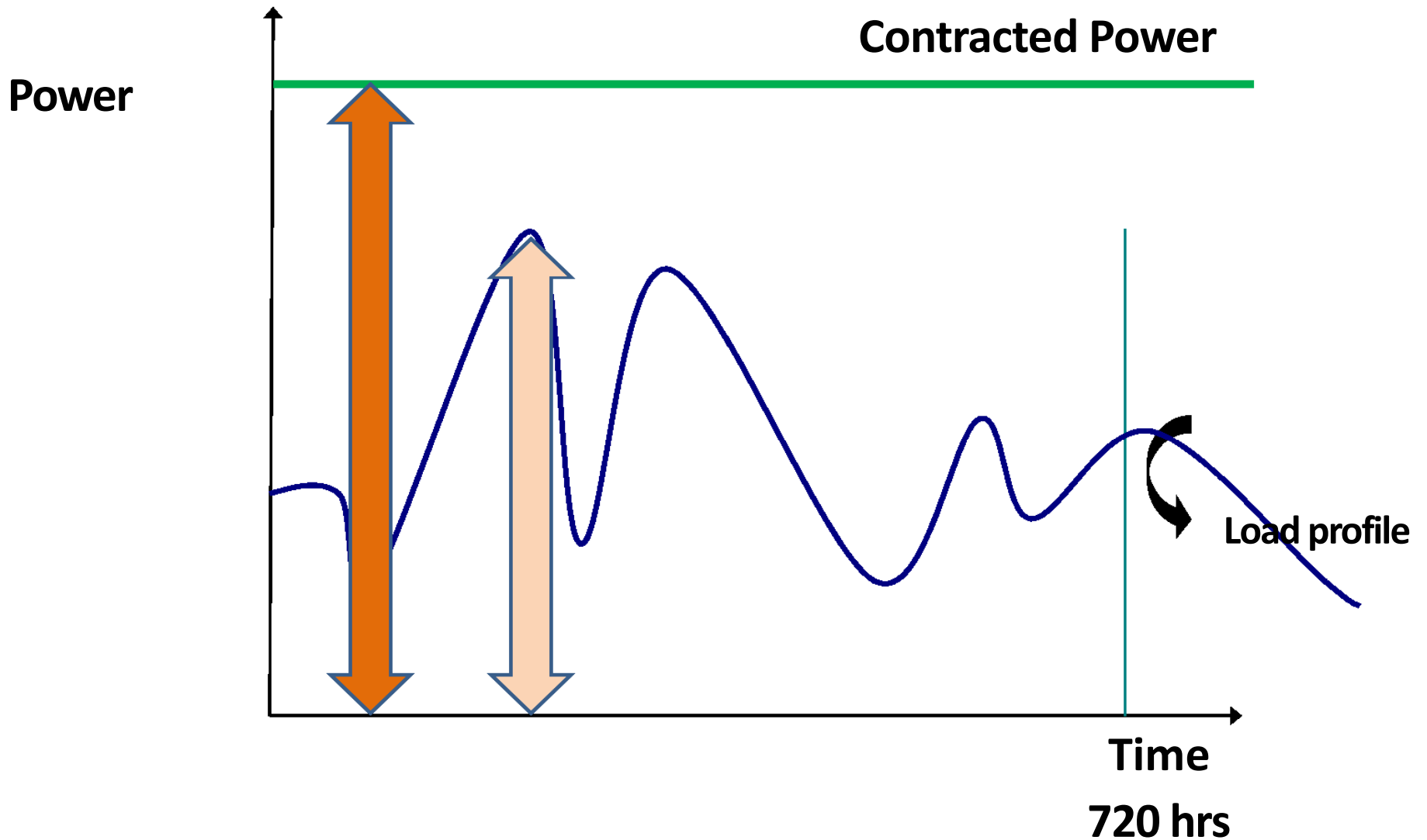
Uniform Energy Rates



Uniform Energy Rates/time of use

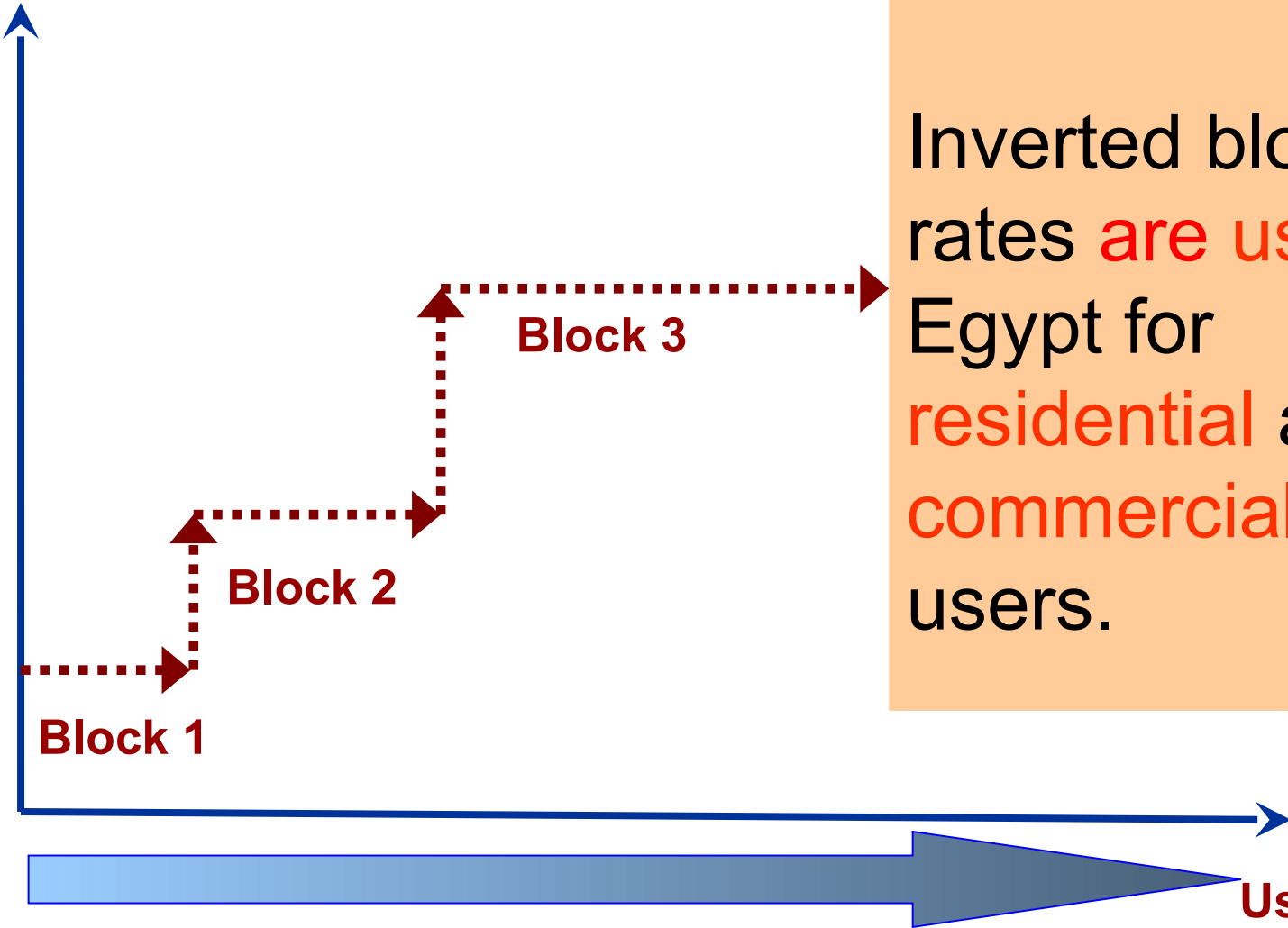


Hourly Monthly Load Profile



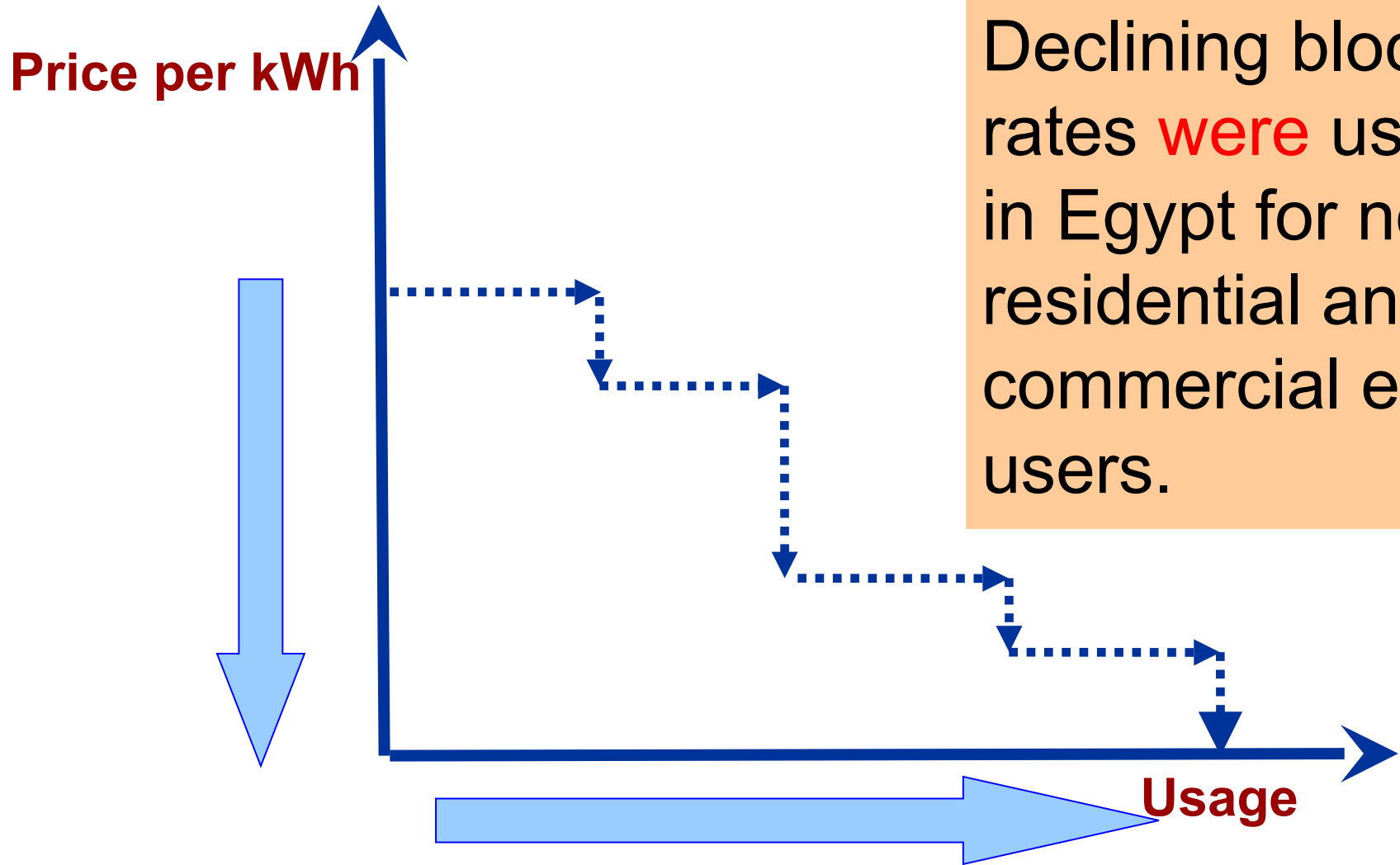
Inclining Block Rates

Price per
(kWh or
M3 of NG)



Inverted block rates **are used** in Egypt for **residential** and **commercial** end users.

Declining Block Rates



Declining block rates **were** used in Egypt for none residential and commercial end users.