# Economic value of energy security.
SoS as a cost-effective risk-management strategy to insure against supply risks

- All energy systems provide *some* level of security.

- Trade-off risk-cost: lower level of risk (higher security) can be reached only at higher costs (NERA, 2002)

- In theory, optimal level of security can be determined knowing

  – the consumers' willingness to pay for extra security (demand curve)

  – the cost of providing extra security (supply curve)

- Sub-optimality: the demand curve as a range of estimates ➔ the *adequate* level of energy security
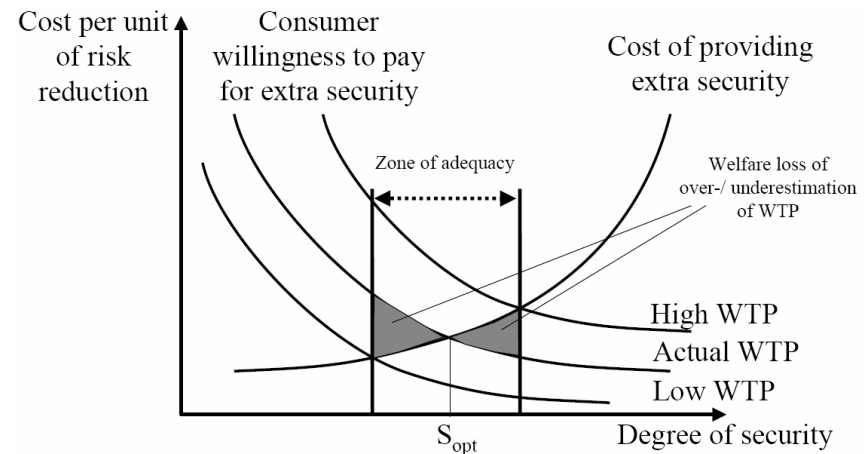
SoS as a cost-effective risk-management strategy to insure against supply risks

- Absolute supply security: a state without any disruption or delay of delivery due to endogenous or exogenous influences
- Flexibility in supply/demand: minimum impact of risks
- Traditional approach vs. market liberalization, with cost/risk judgments and a transparent security framework which set out:
  - the specific security events for which responses need to be designed;
  - the obligations which should be placed on different market players for the minimum level of supply and capacity;
  - the costs associated and how these should be allocated