400Vdc Direct Distribution for Data Centers and Telco Facilities

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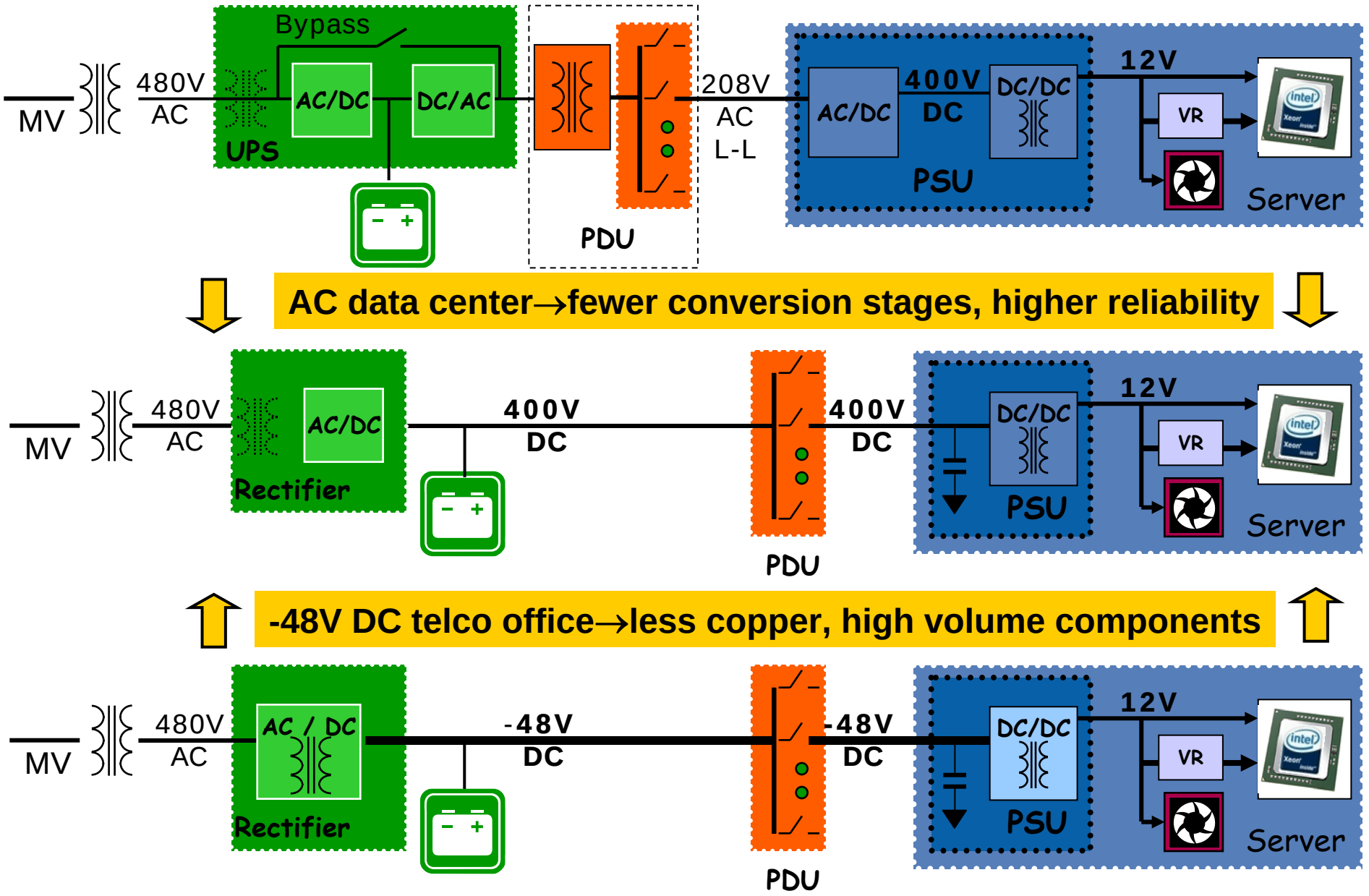
"If I have seen further it is by standing on ye shoulders of Giants."
Isaac Newton

October 1, 2007

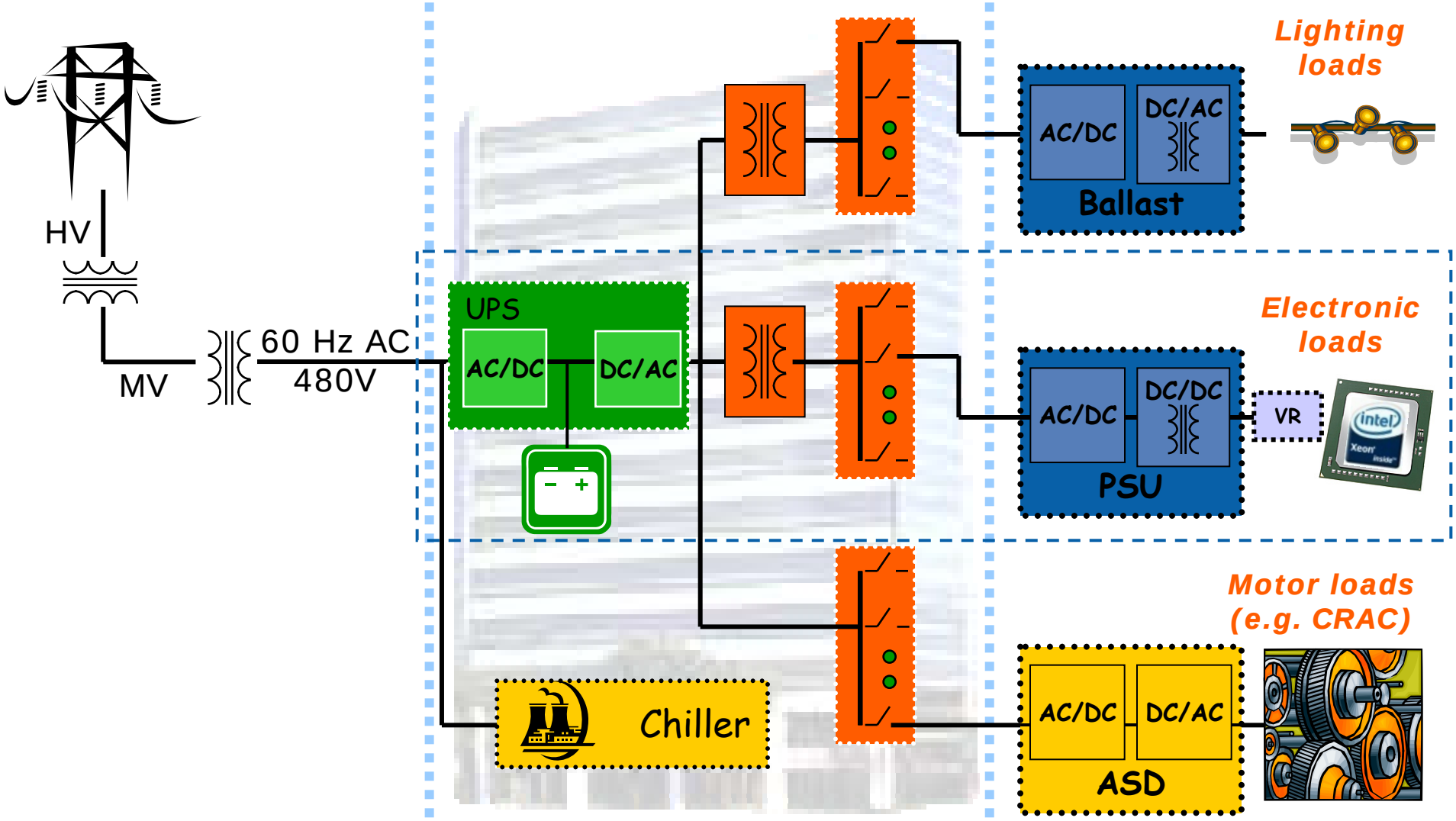
Intel engagement

- Who?
  - Systems Technology Lab, Corporate Technology Group
  - Focus on system solutions for future platforms
- Why?
  - Maximize the benefit of improved perf/watt at Silicon level
  - End user benefits:reduced utility bills & greater density
  - Societal benefits :reduced global carbon footprint
- Why 400Vdc?
  - Highest efficiency / lowest energy costs
  - High efficiency interconnection to renewable sources

Moving towards 400Vdc

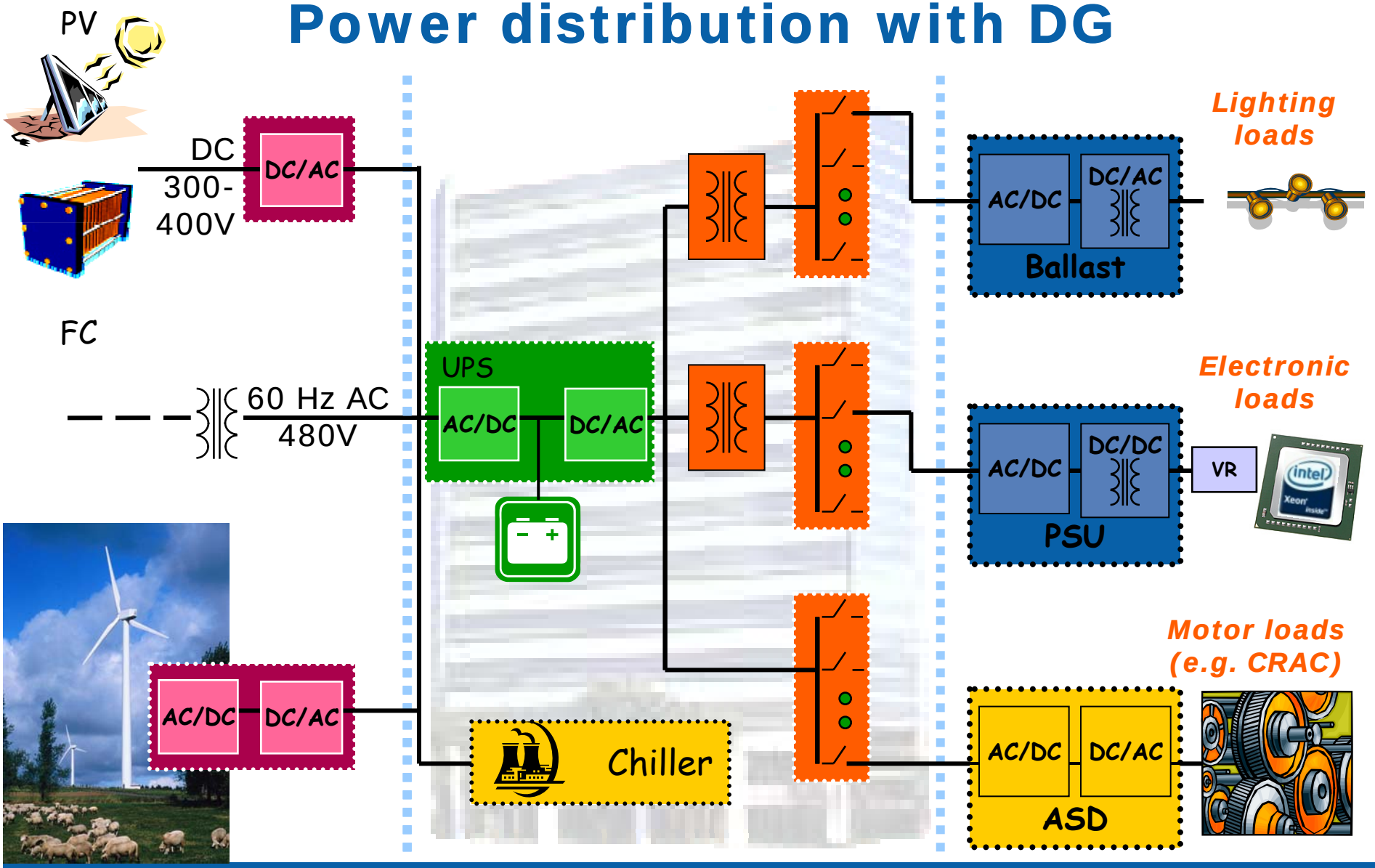


Data center power distribution



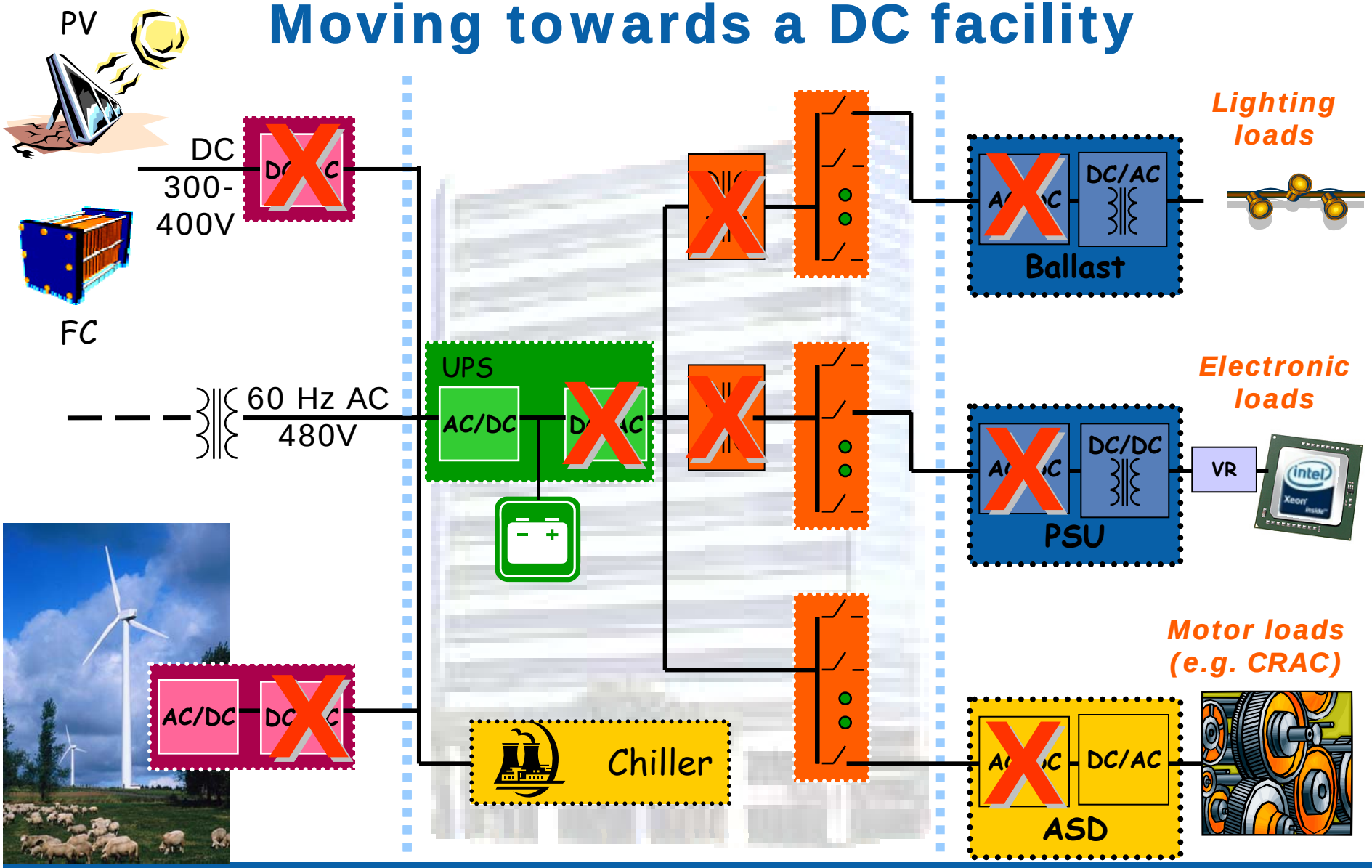
ASD : Adjustable Speed Drive
CRAC : Computer Room Air Conditioner

Power distribution with DG



PV : Photo Voltaic
FC : Fuel Cell

Moving towards a DC facility



Moving towards a DC facility