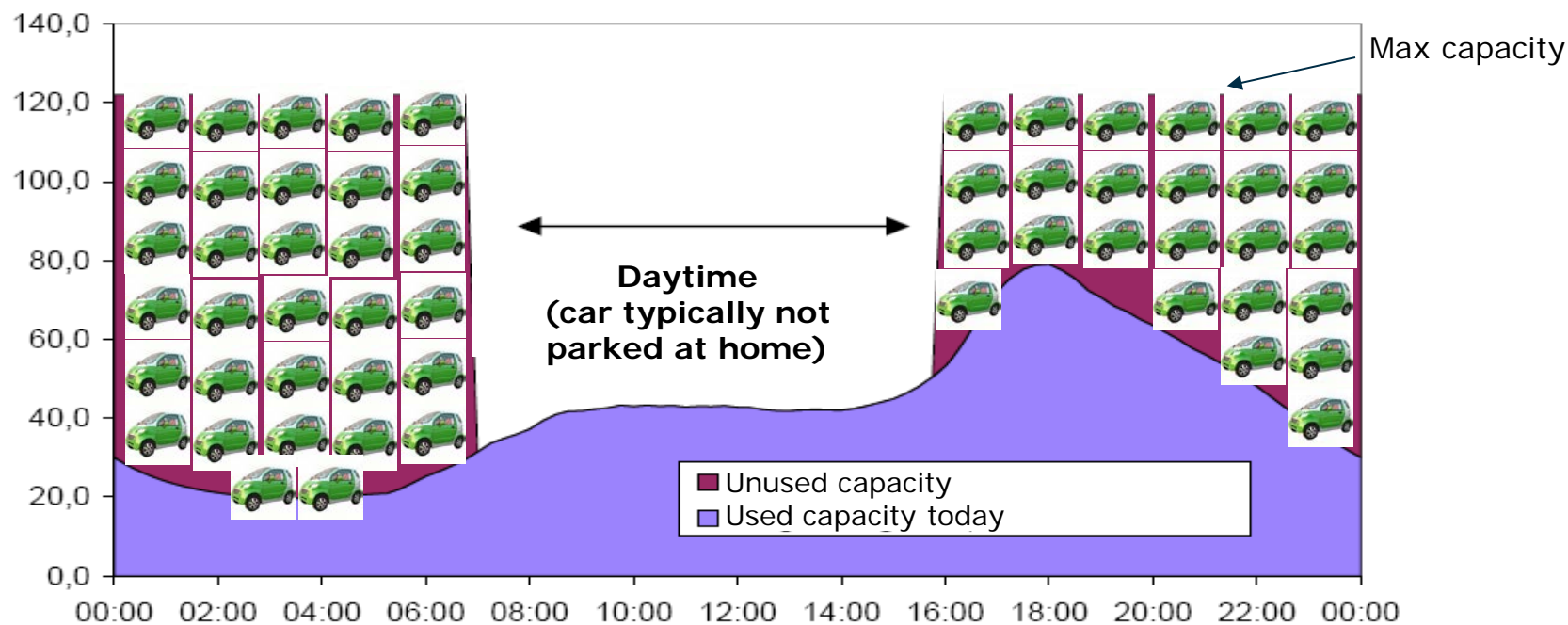


Capacity in the distribution grid to EV charging

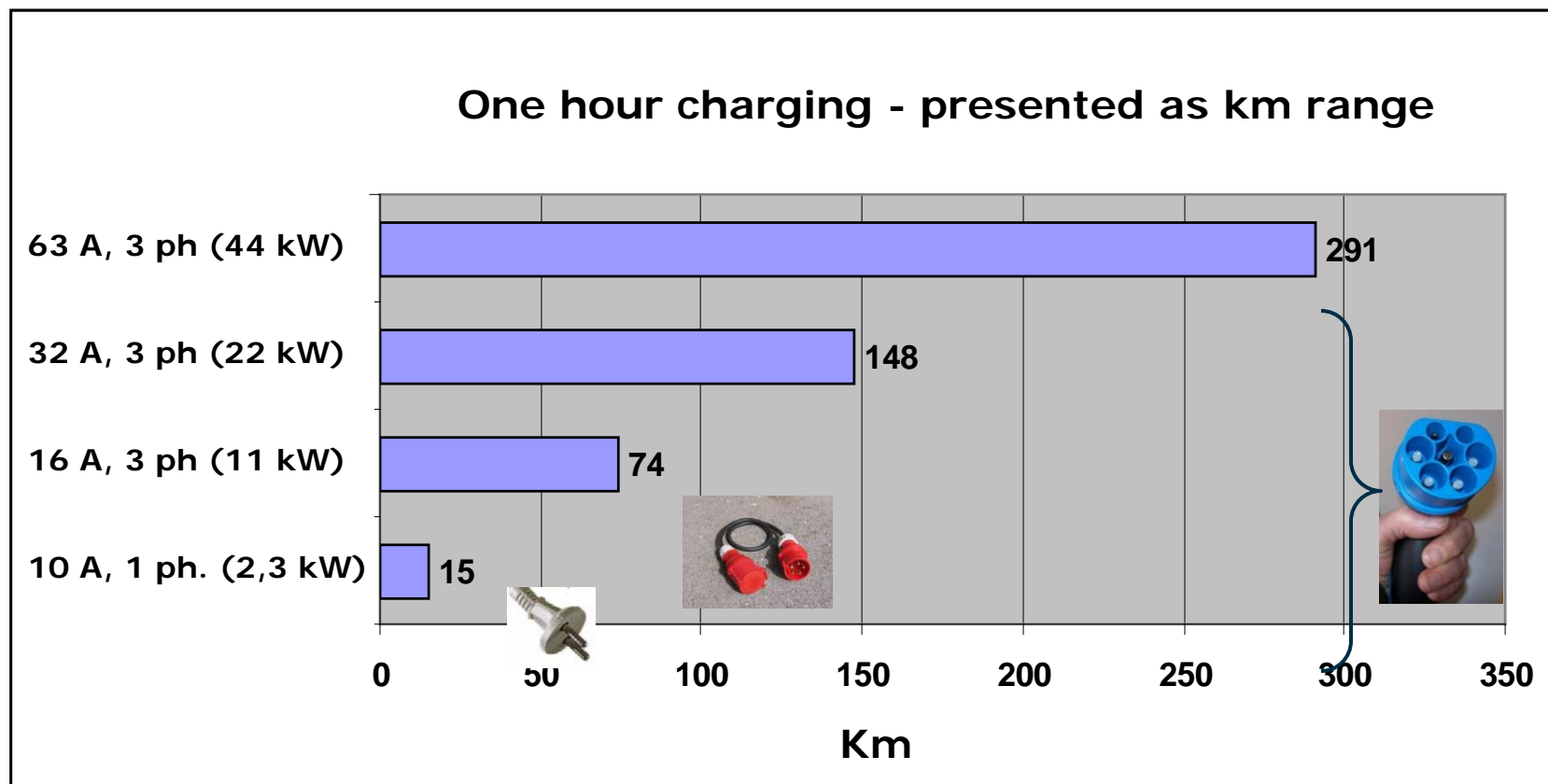
Case study in a low voltage distribution net (0,4 kV in DK) with low capacity
16 Amps 3-phase charging example

Current in radial [A]



Only 3 cars with 16Amp 3-phase can charge in peak hours at 17-18
But: More than 50 cars evenly distributed
A high value of Smart Grid to control the charging !

Charging power– how far on one hours charging



The IEC 62196-2 type II plug can handle 50 km charging at 10-15 min!
If the power grid and the EV can handle the power capacity !
A need for an intelligent grid (Smart Grid) to manage this power