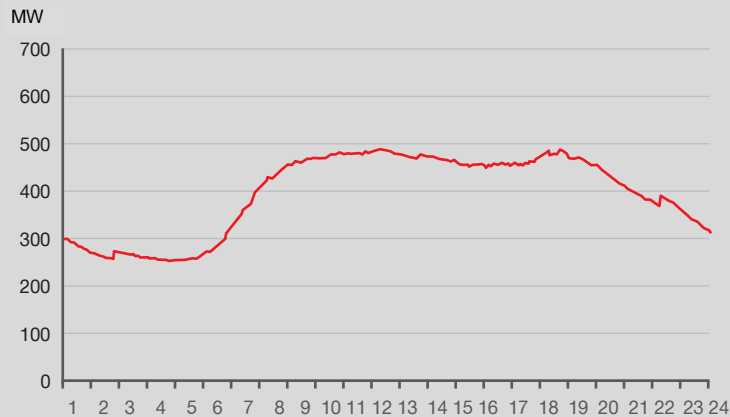


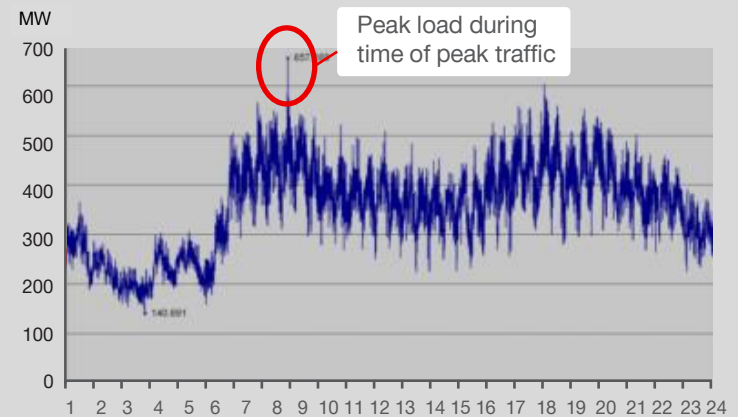
The challenge.

Dynamic load profile with short-term load peaks.

1 day in Zurich (50 Hz)



1 day at SBB (16.7 Hz)



Load dynamics

Zurich city

SBB

Daily:

up to 250 MW

up to 500 MW

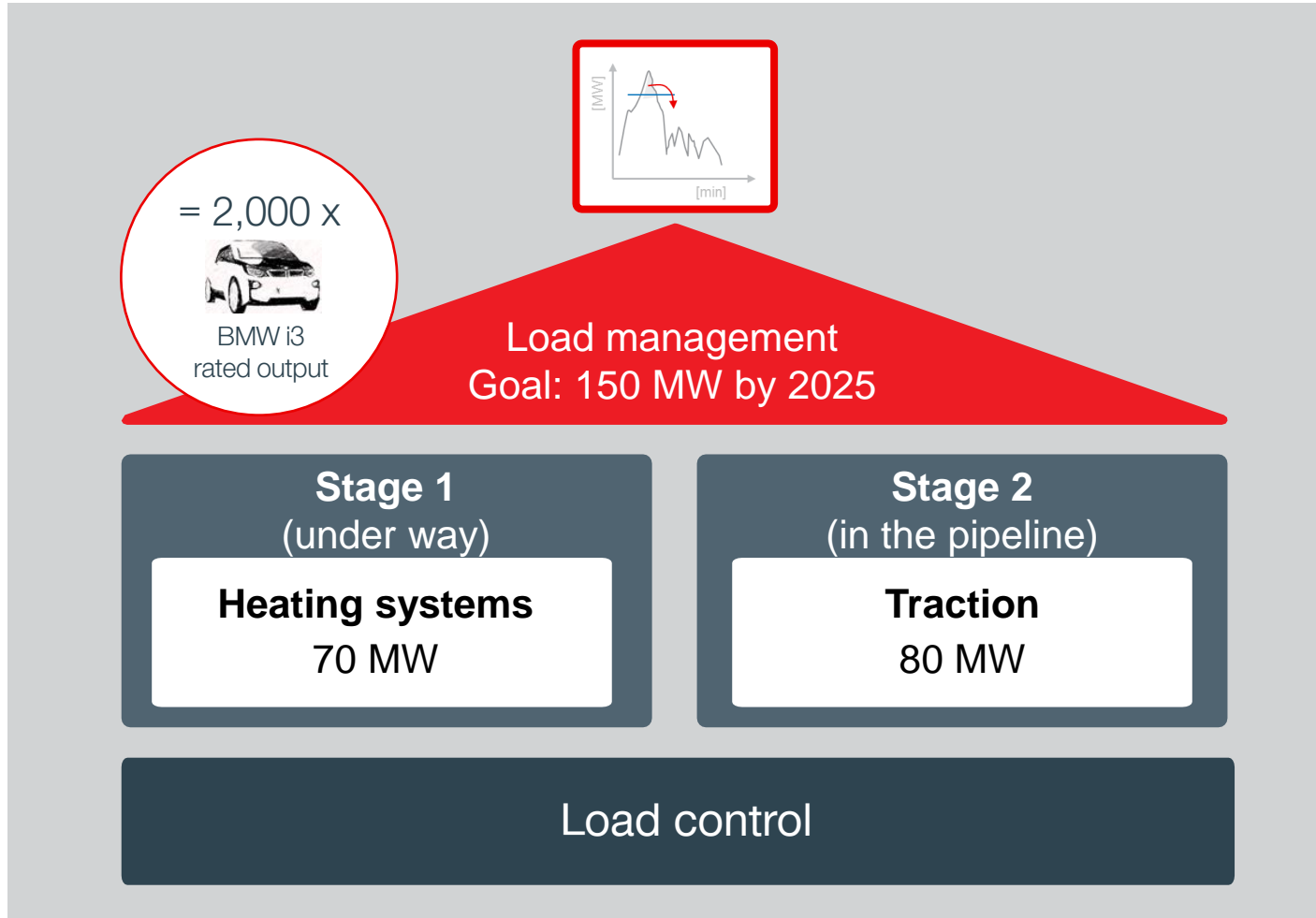
15 minutes:

up to 35 MW
(7% of maximum
load)

up to 300 MW
(50% of
maximum load)

SBB's load management programme.

Reducing the power requirement by 20%.



The smart grid in the world of rail power.

Reducing investment with load management.

