

The Green Village

‘Creating a sustainable, lively and entrepreneurial environment where we discover, learn and show how to solve society’s urgent challenges’

Future Labs

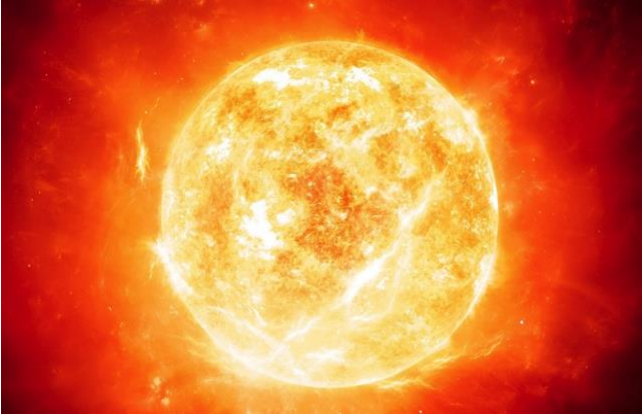
Public

Engines

Co-Creation

The Green Village: Missions

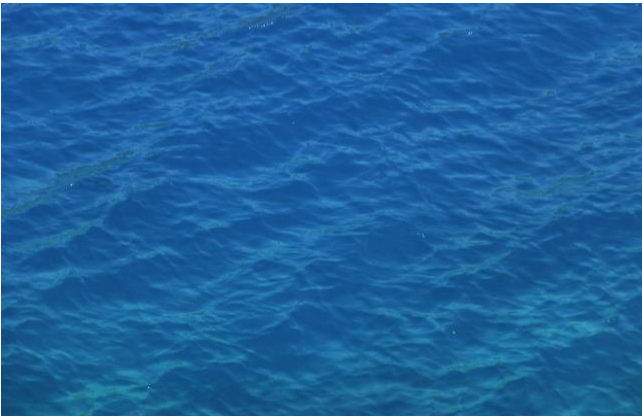
Clean energy



Clean air



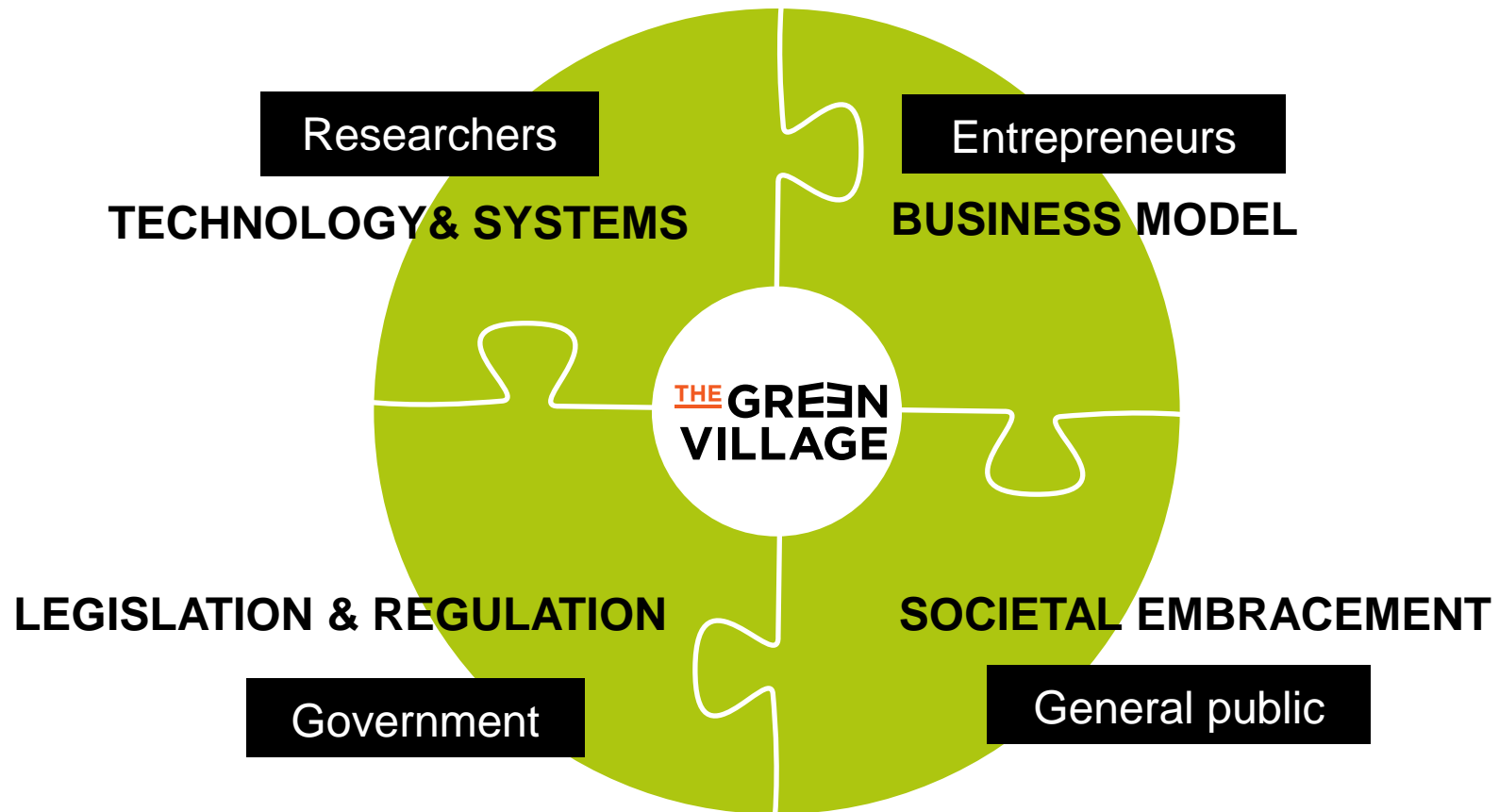
Clean water



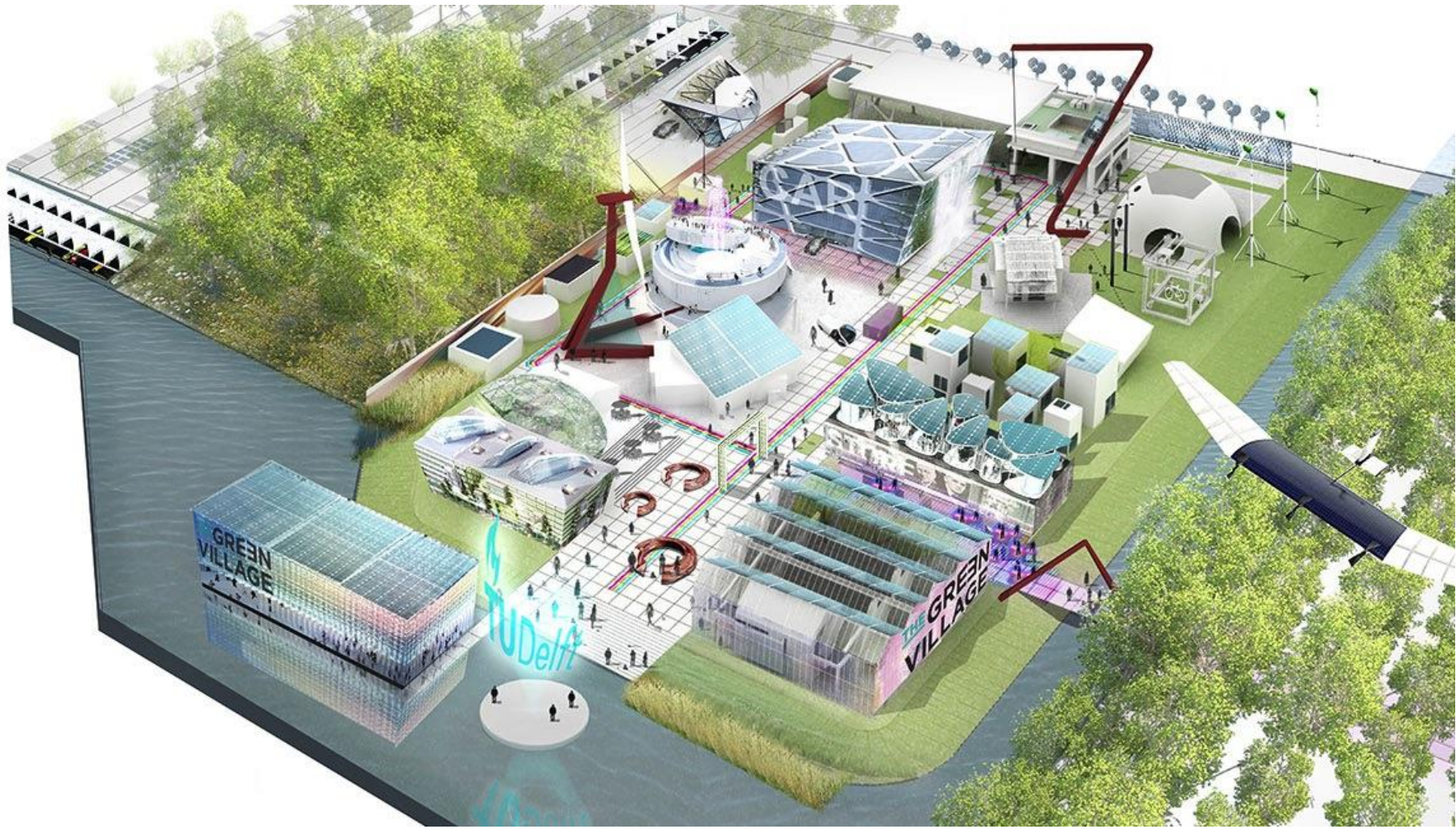
Waste as resource



The Green Village: Accelerating paradigm shifts



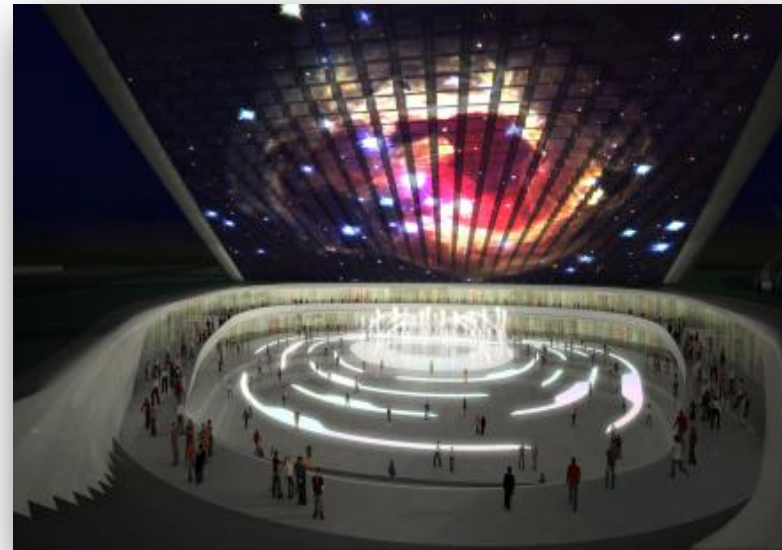
Master plan the Green Village



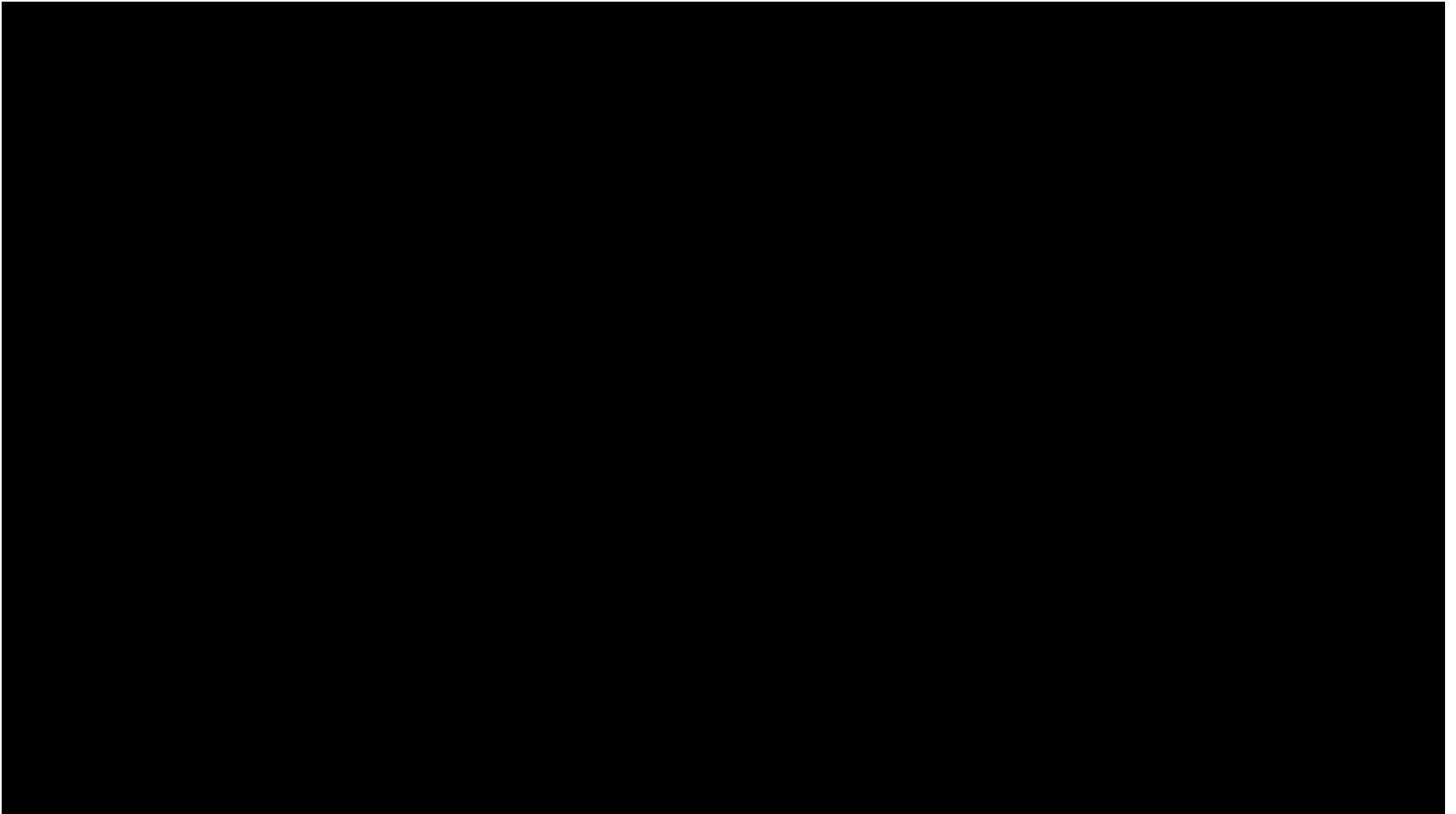
LED revolution

Present lighting system less than 1% efficient

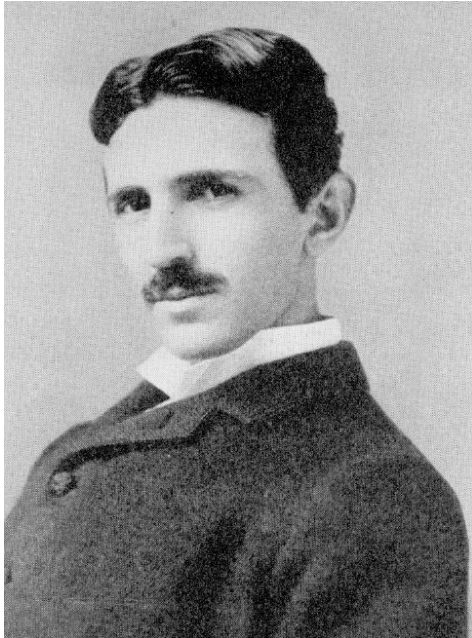
- LED factor 4 more efficient technology
- LED distance reduction is more energy efficient
- LED is dynamic and interactive
- LED creates new products
- LED creates new services



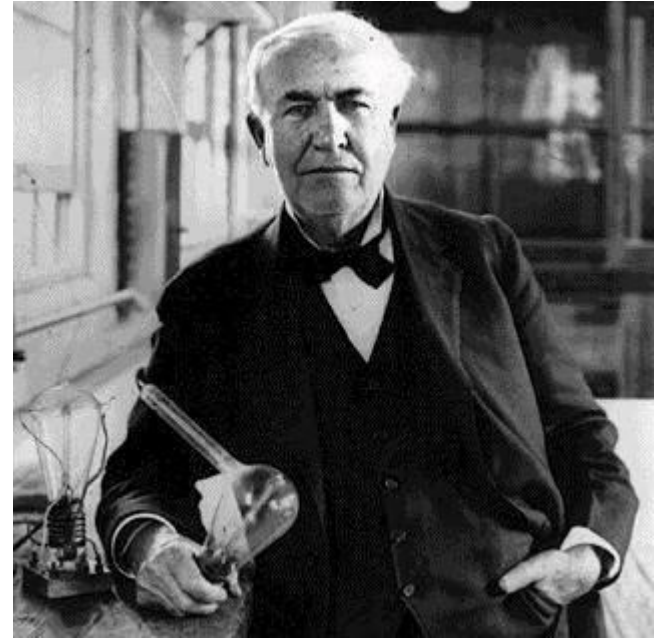
Smart Window



The AC / DC Battle



VS



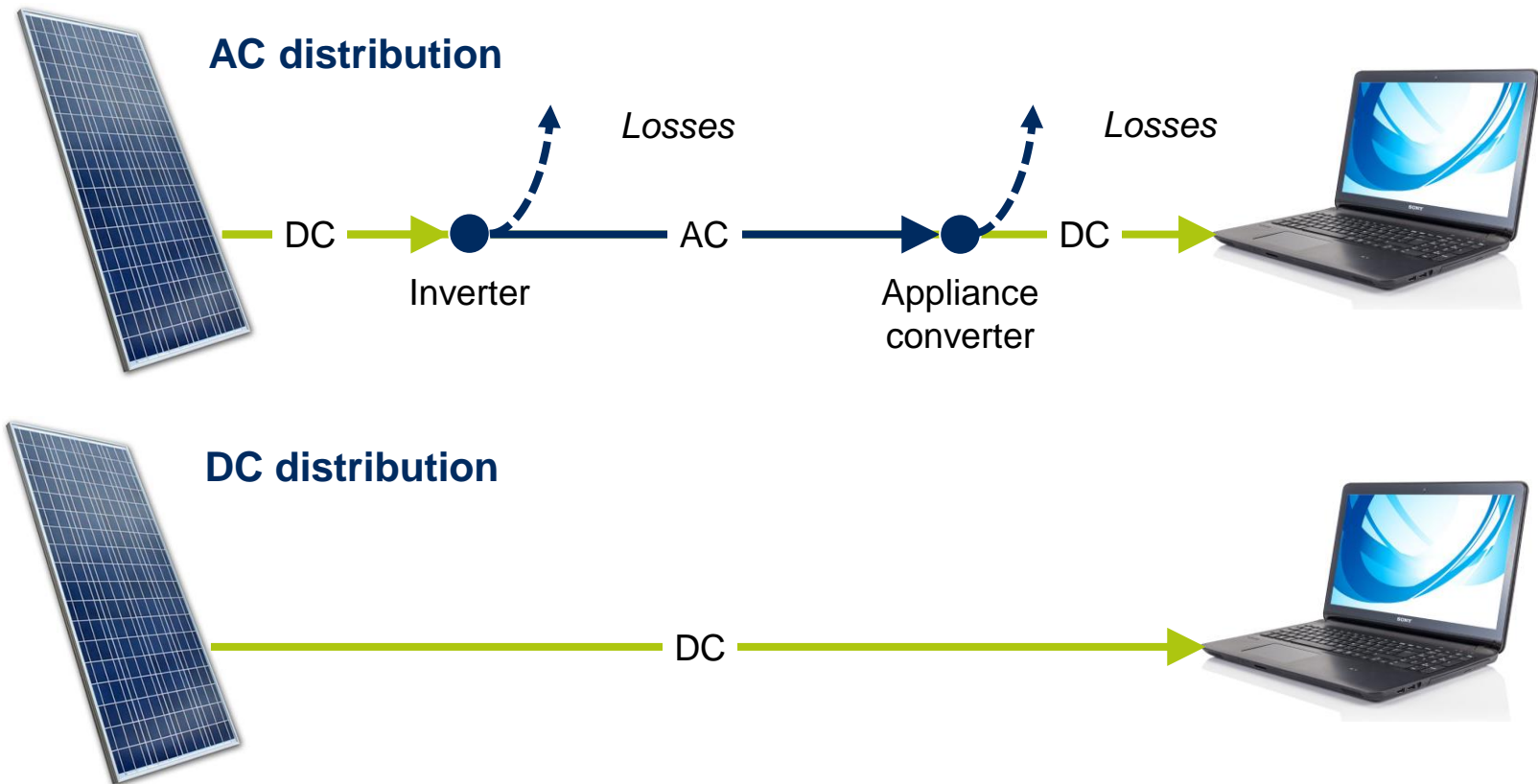
Nikola Tesla
10 July 1856, New York

AC

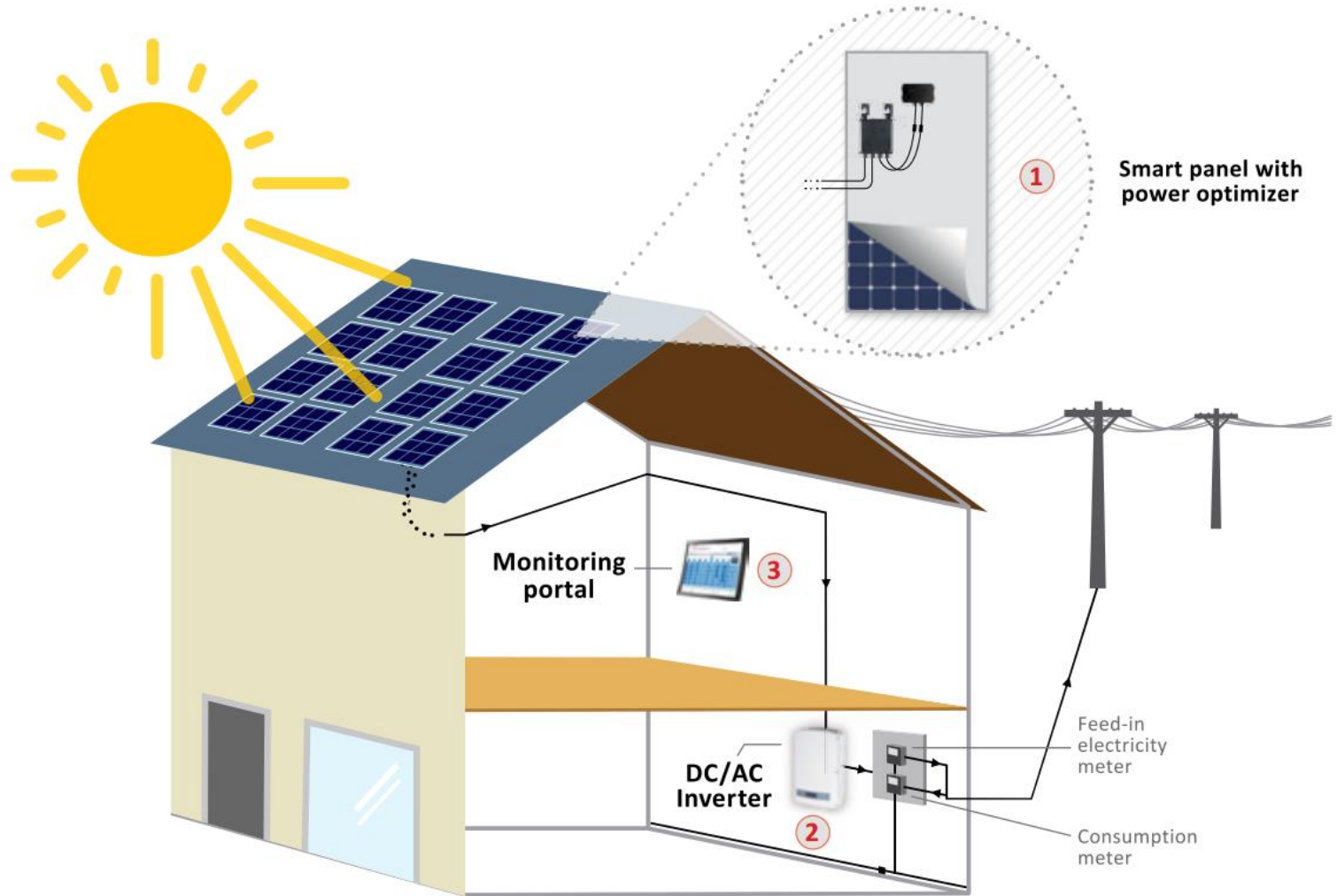
Thomas Edison
11 february 1847, West Orange

DC

AC-DC losses



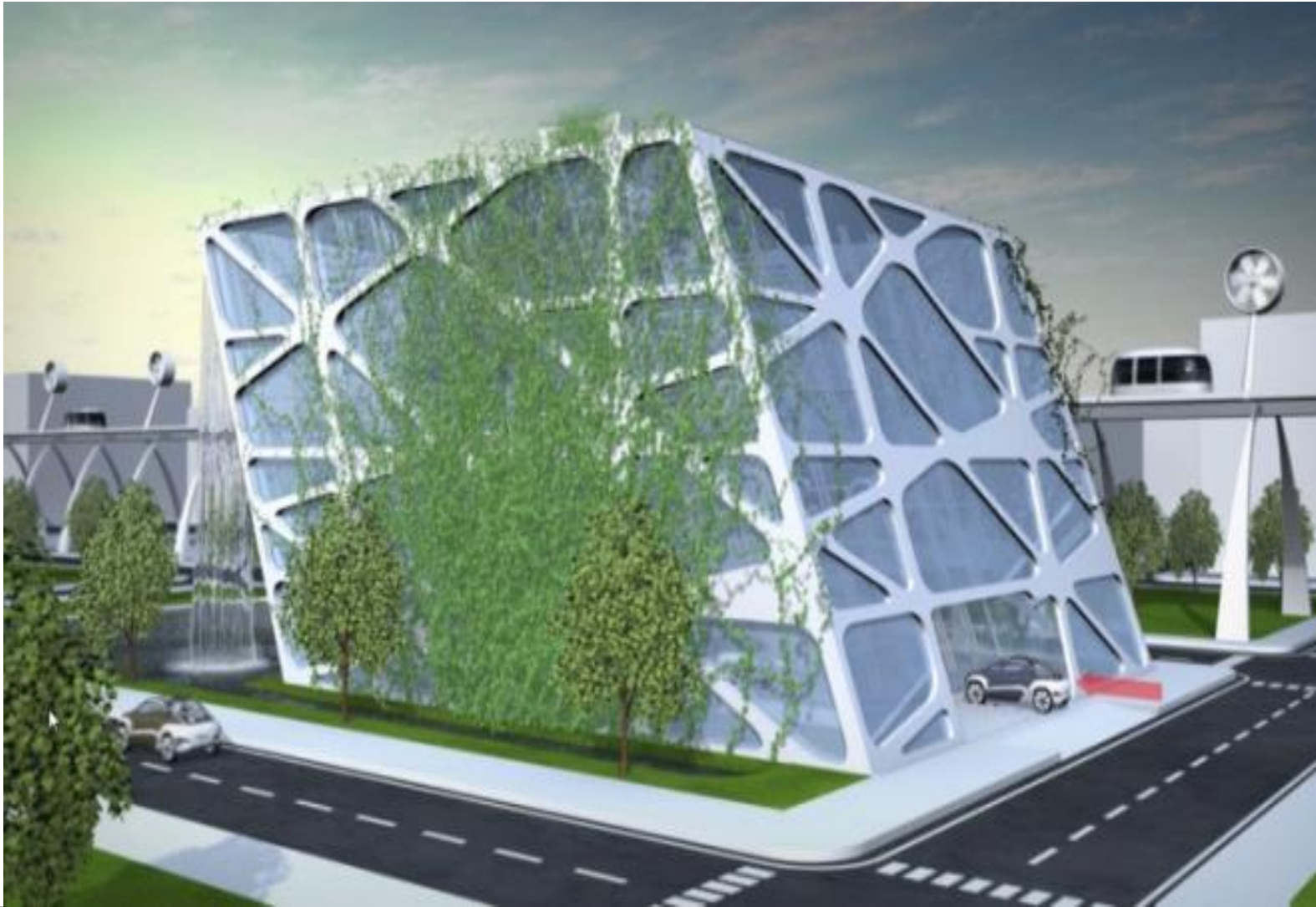
Solar System, parallel DC



Hyundai ix35 FCEV



Car park power plant



Our cars take over power plants

Power plants

Total installed capacity (2010)

5.000 GW



Cars

1 car = **50 kW**

1.000 million cars (2010)

1.000 million x 50 kW =

50.000 GW

(5% of time in operation)

New cars

1 new car = **100 kW**

80 million new cars per year

80 million x 100 kW =

8.000 GW

per year