a sustainable data centre and space control facility is more secure for meeting mission requirements

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QUO VADIS HOMO SAPIENS:

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1a USE = 1.000.000a SUSTAINABLE PRODUCTION

QUO VADIS HOMO SAPIENS:

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QUO VADIS HOMO SAPIENS:

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NET ZERO ROAD MAP

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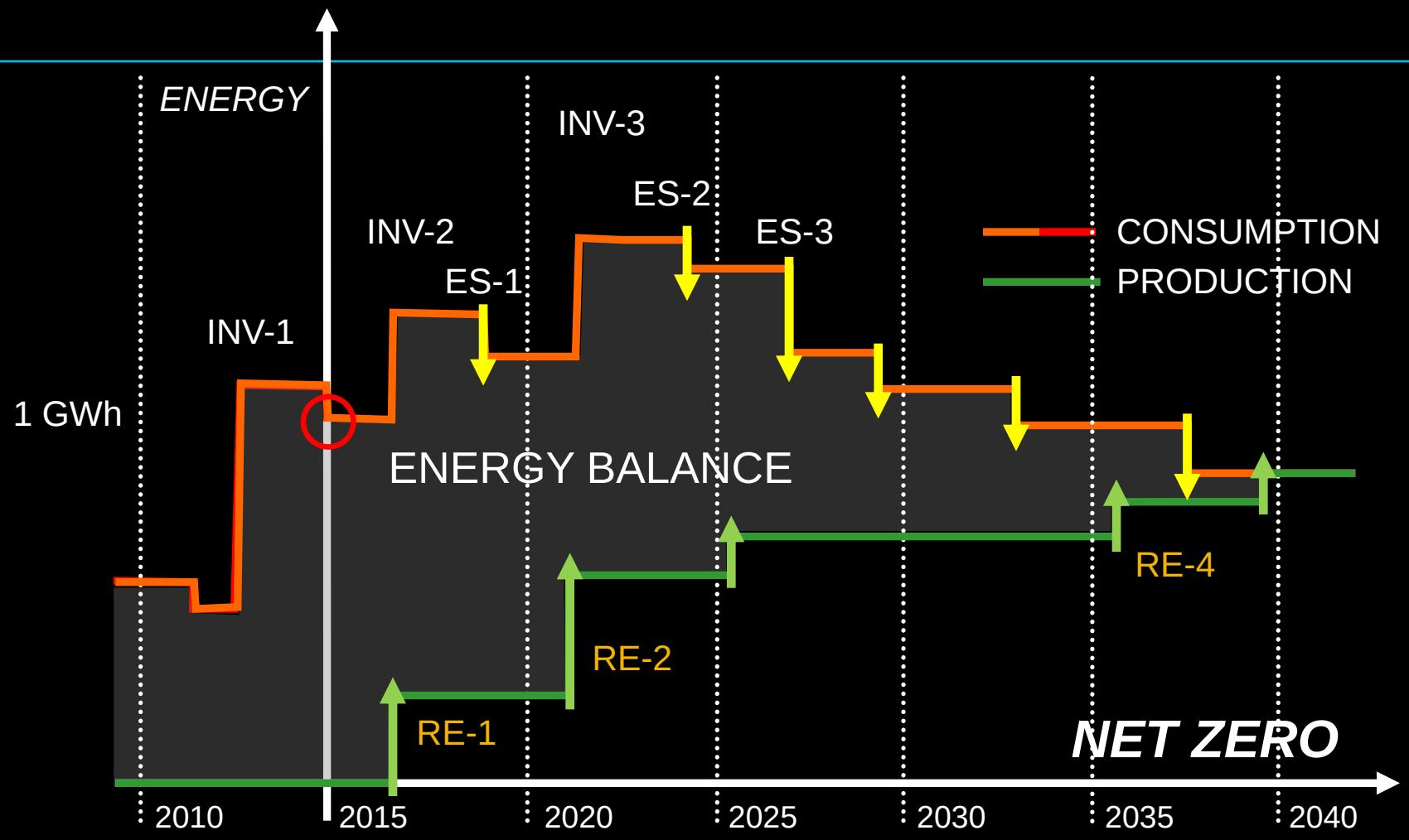
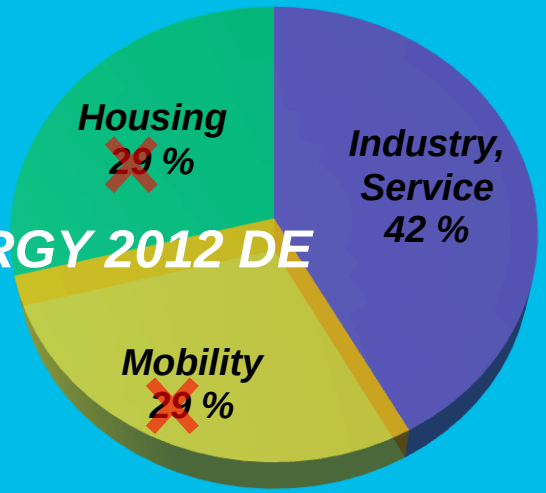


EXPERIENCE “AH”



ENERGY 2012 DE

1

ACTIVE HOUSE – 2015

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energy for house and 20.000 km/a e-mobility; “pret-a-porter”

1.750 Euro/M² BGF x 173 M² = 302.750 Euro

ACTIVE HOUSE – 2015
1 kW House

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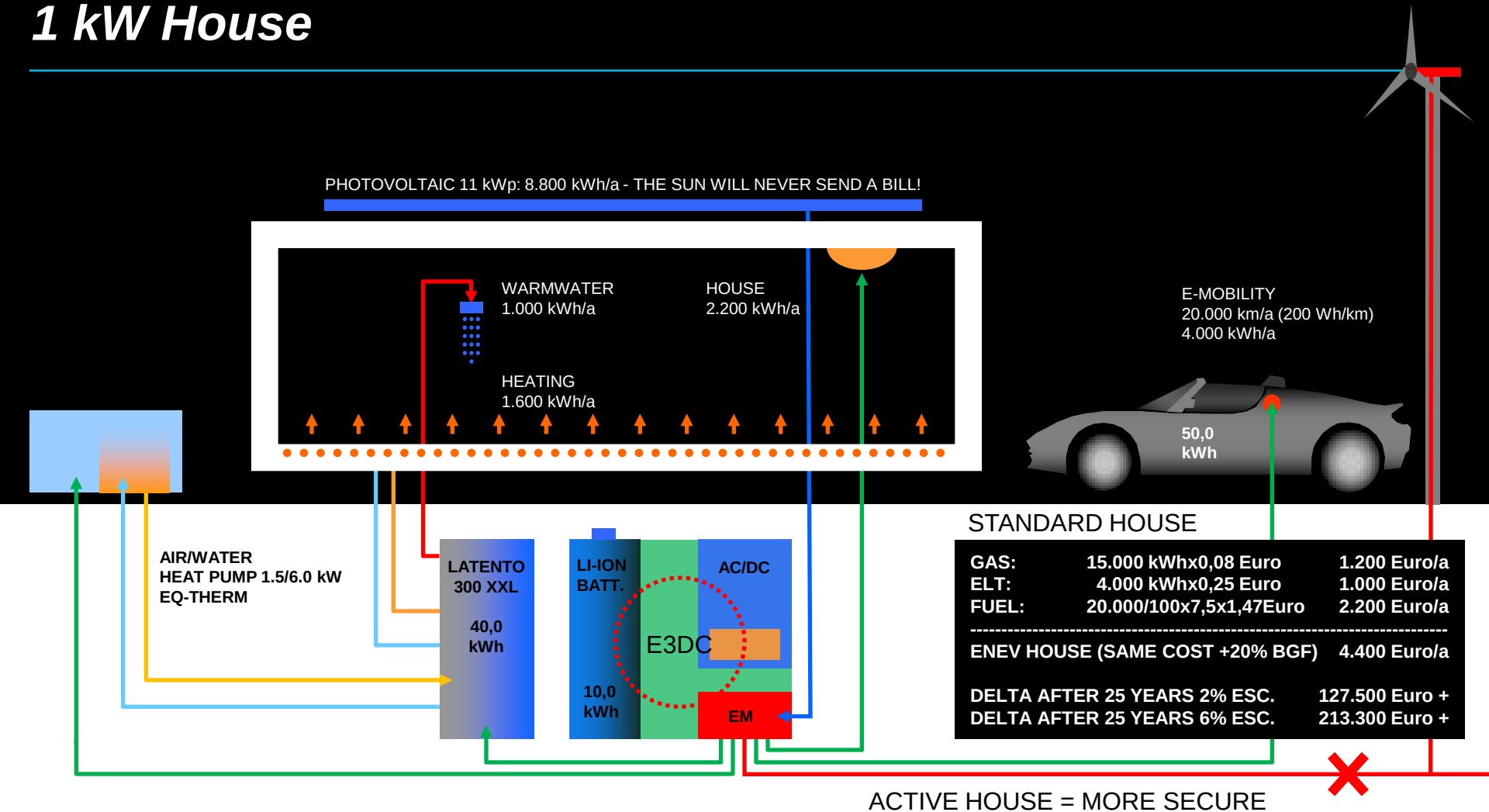

STANDARD HOUSE

GAS:	15.000 kWhx0,08 Euro	1.200 Euro/a
ELT:	4.000 kWhx0,25 Euro	1.000 Euro/a
FUEL:	20.000/100x7,5x1,47Euro	2.200 Euro/a
ENEV HOUSE (SAME COST +20% BGF)		4.400 Euro/a
DELTA AFTER 25 YEARS 2% ESC.		127.500 Euro +
DELTA AFTER 25 YEARS 6% ESC.		213.300 Euro +

ACTIVE HOUSE = MORE SECURE

ACTIVE HOUSE – 2015
1 kW House

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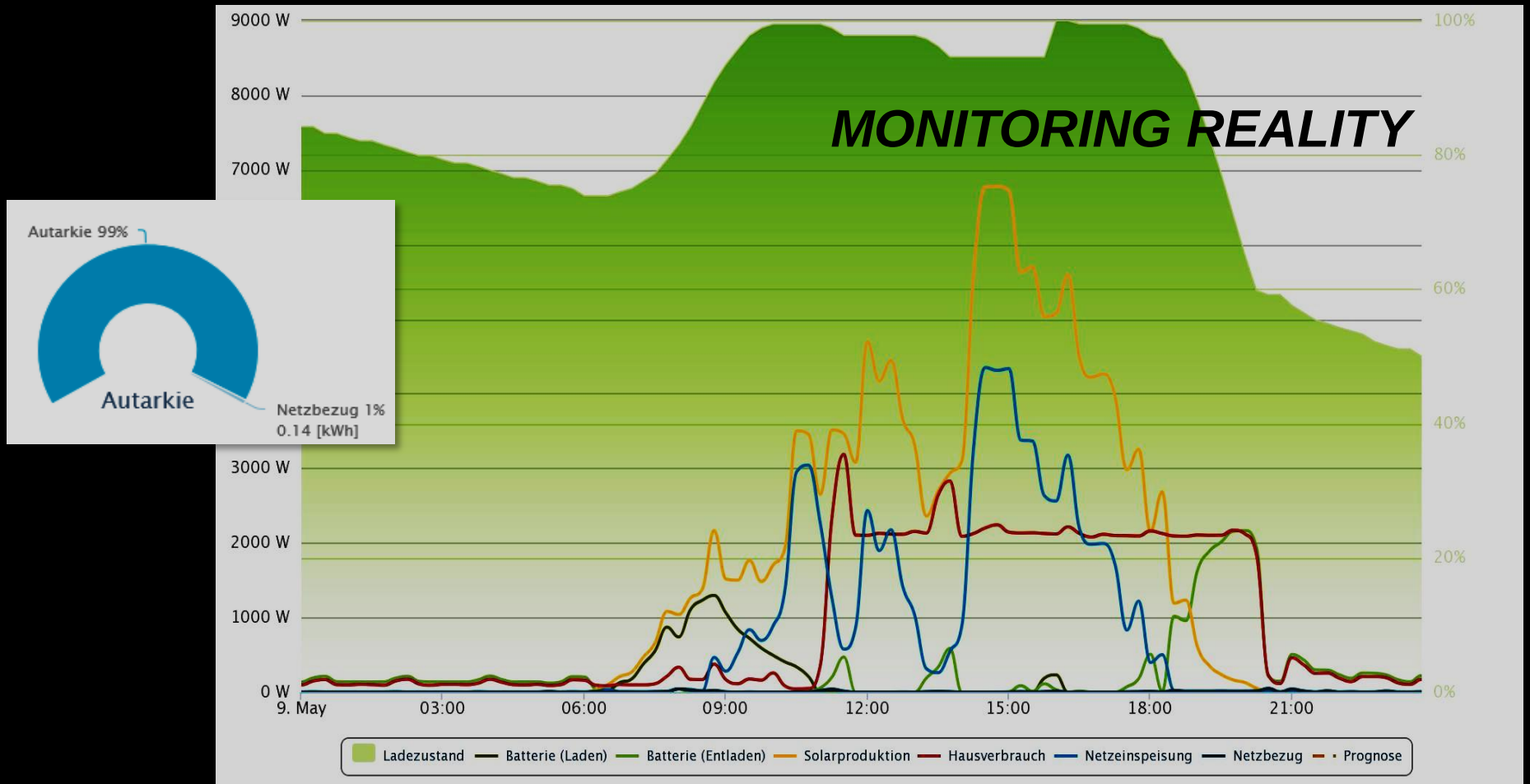

ACTIVE HOUSE – 2015
1 kW House

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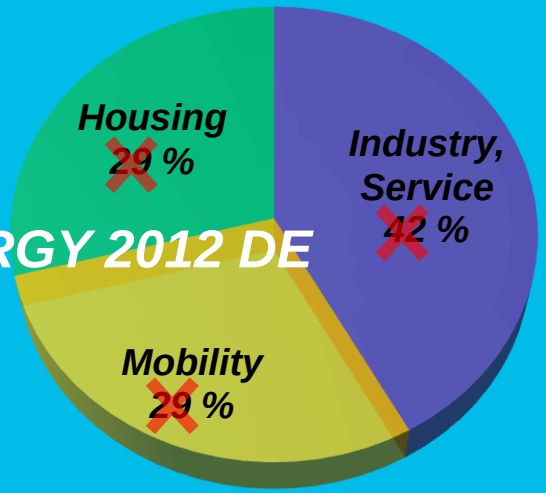
1-ST PRIZE 2015
ENERGY AGENCY RLP

EXPERIENCE “IPC”



ENERGY 2012 DE

2

SUSTAINABLE DATA CENTER: 18 Mil. Euro
1 MW – PUE 1,25

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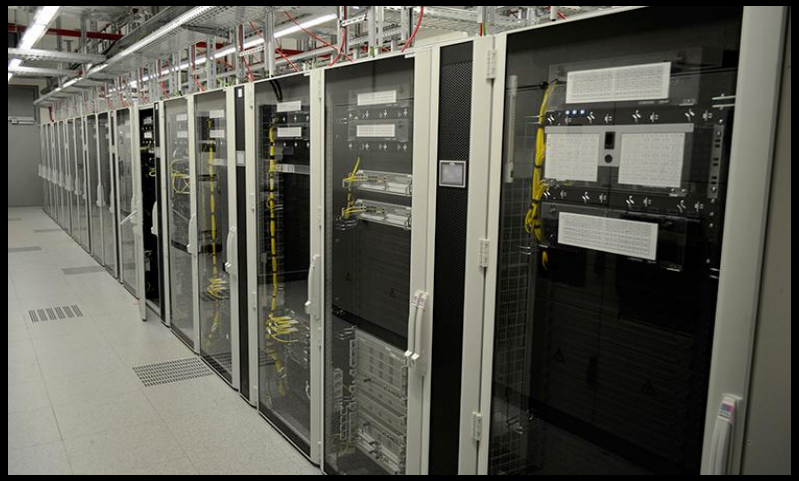
BGF x 30 = 5.200 m²
ECC x 60 = 18 Mil. Euro
ELT x 1.250 = 1.250 kW

U.S. GREEN BUILDING COUNCIL
LEED GOLD
USGBC

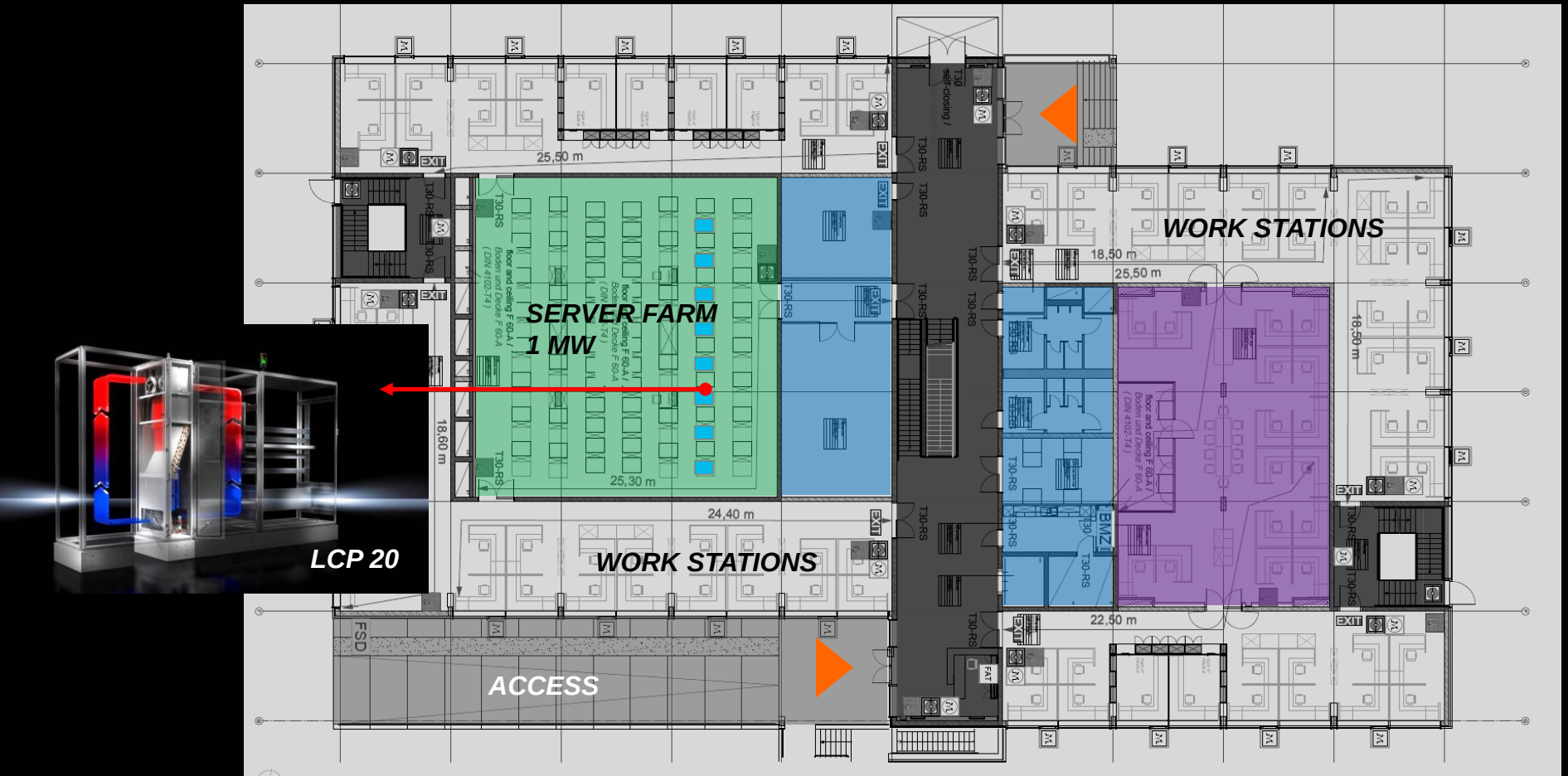
SUSTAINABLE DATA CENTER: 18 Mil. Euro
1 MW – PUE 1,25

AECOM



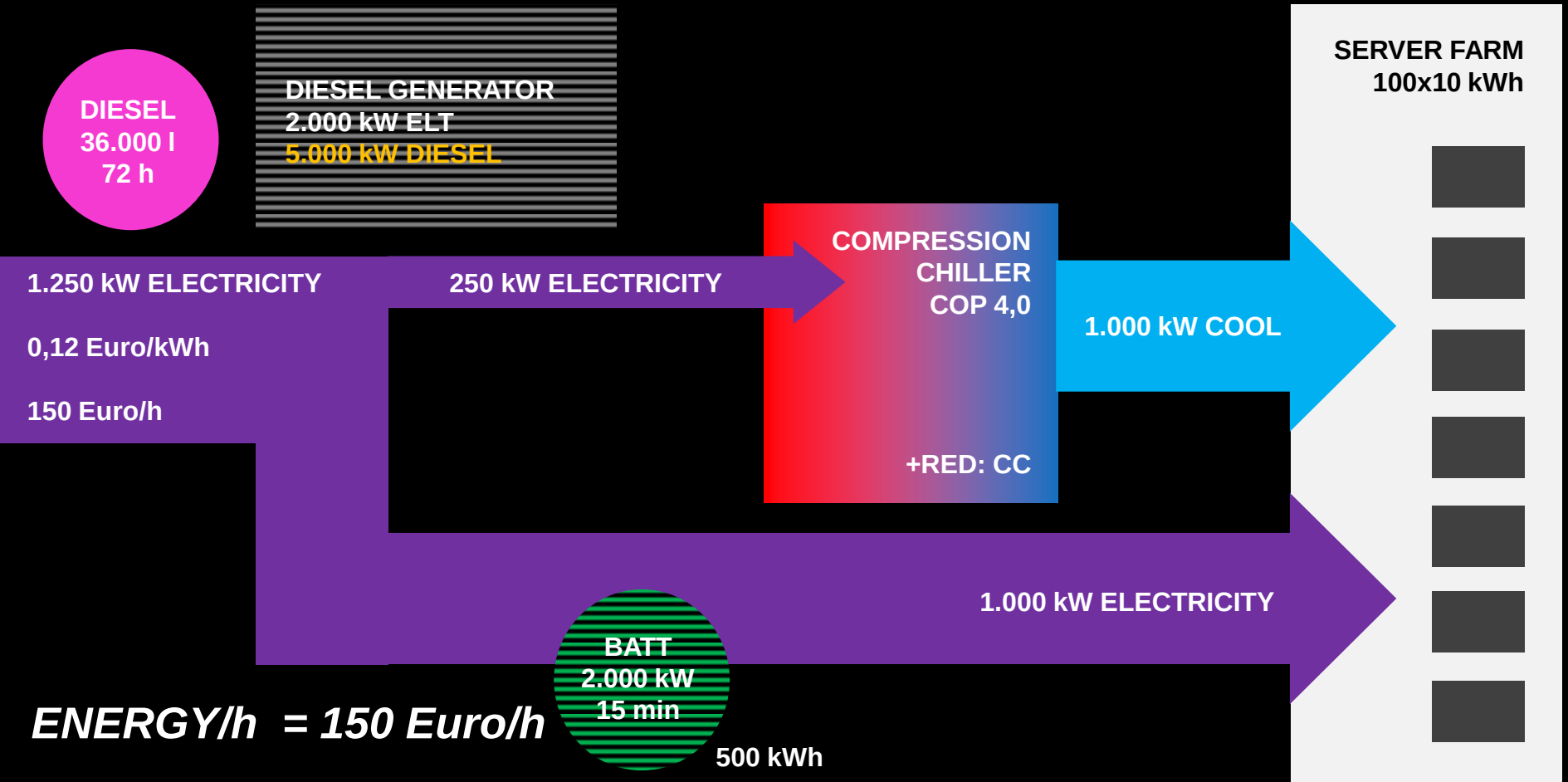
SUSTAINABLE DATA CENTER: 18 Mil. Euro
1 MW – PUE 1,25

AECOM



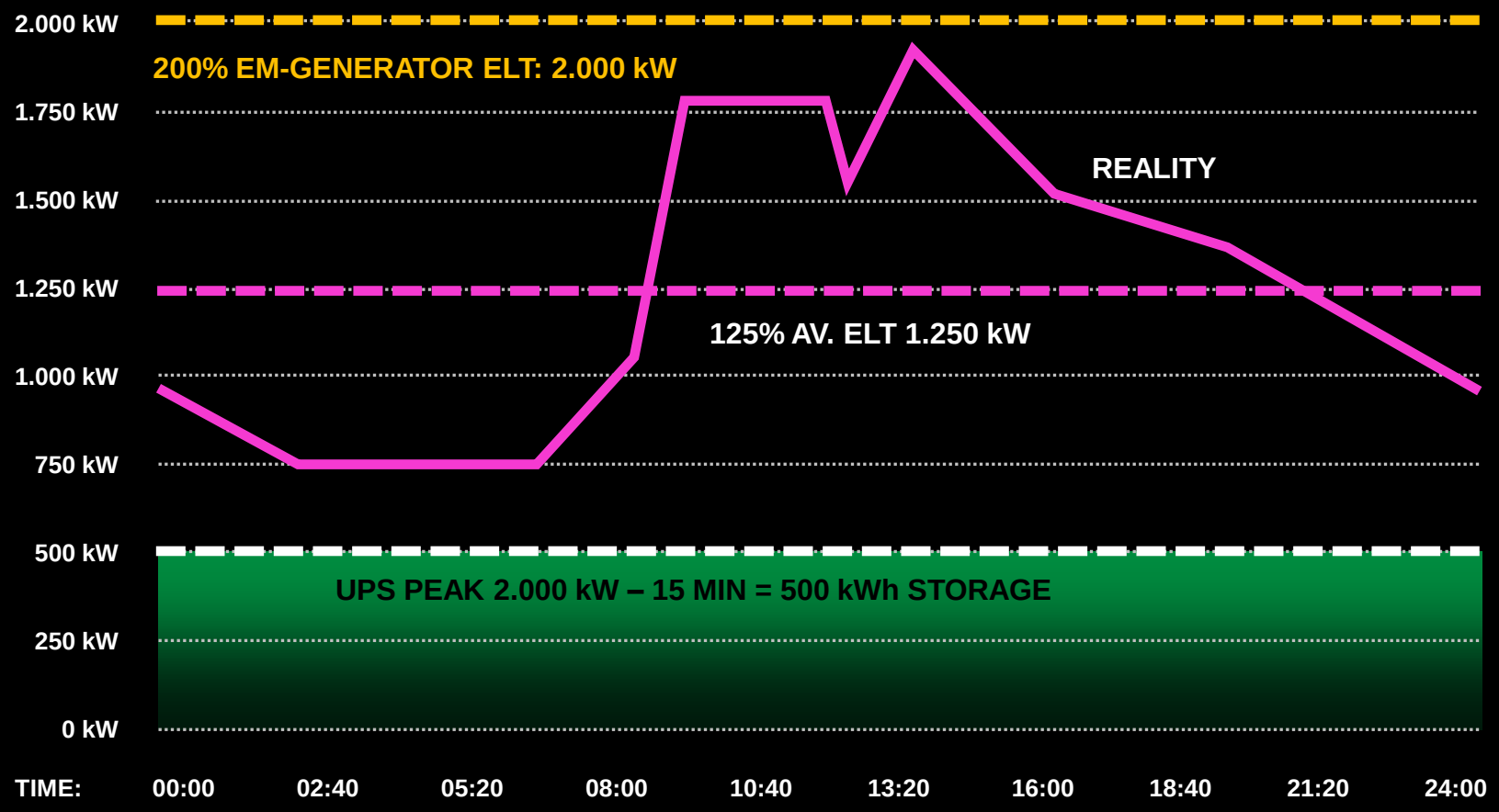
DATA CENTER - OPTION GRID:
1 MW – PUE 1,25

AECOM



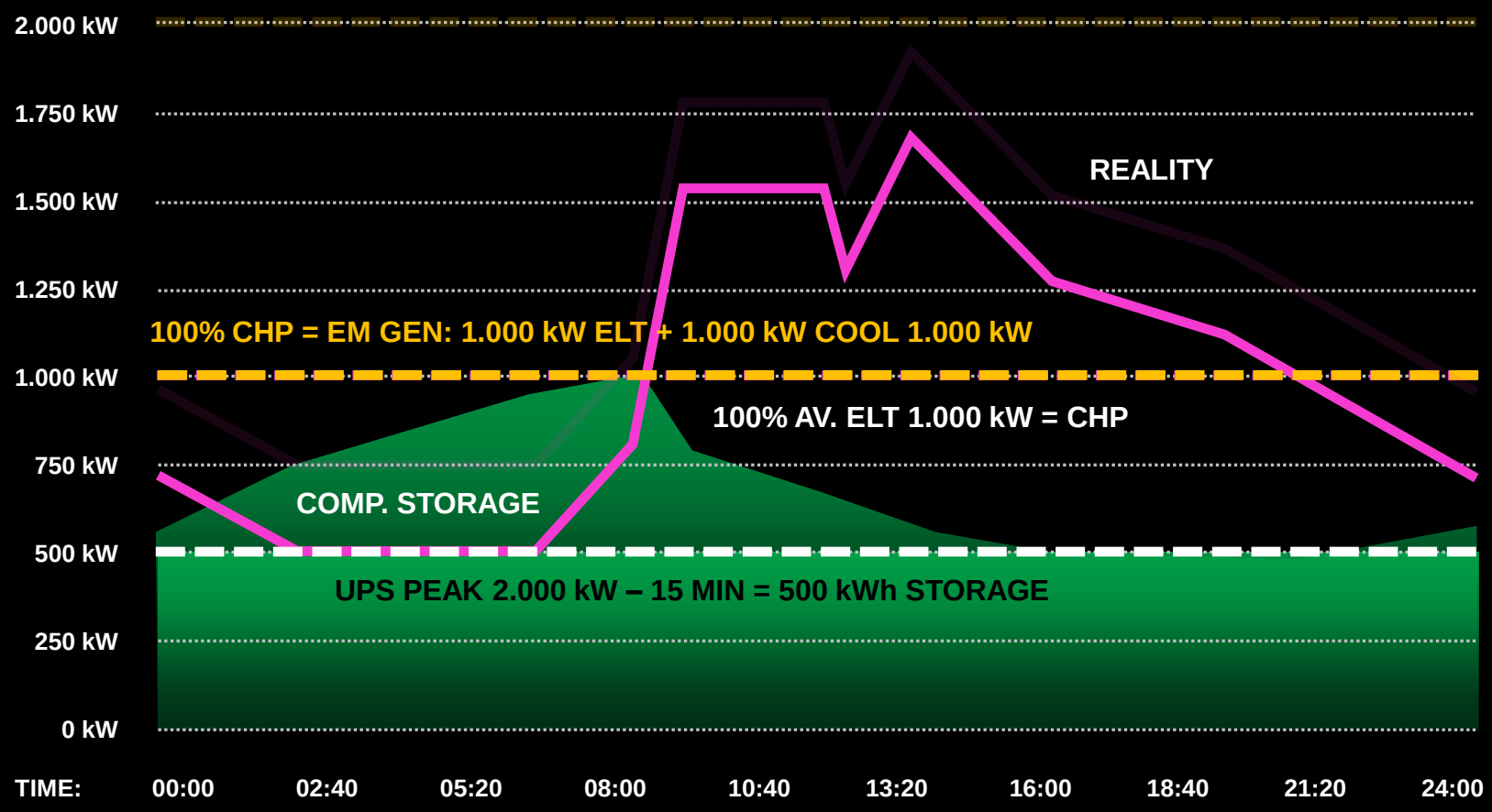
DATA CENTER - OPTION GRID:
1 MW – PUE 1,25

AECOM



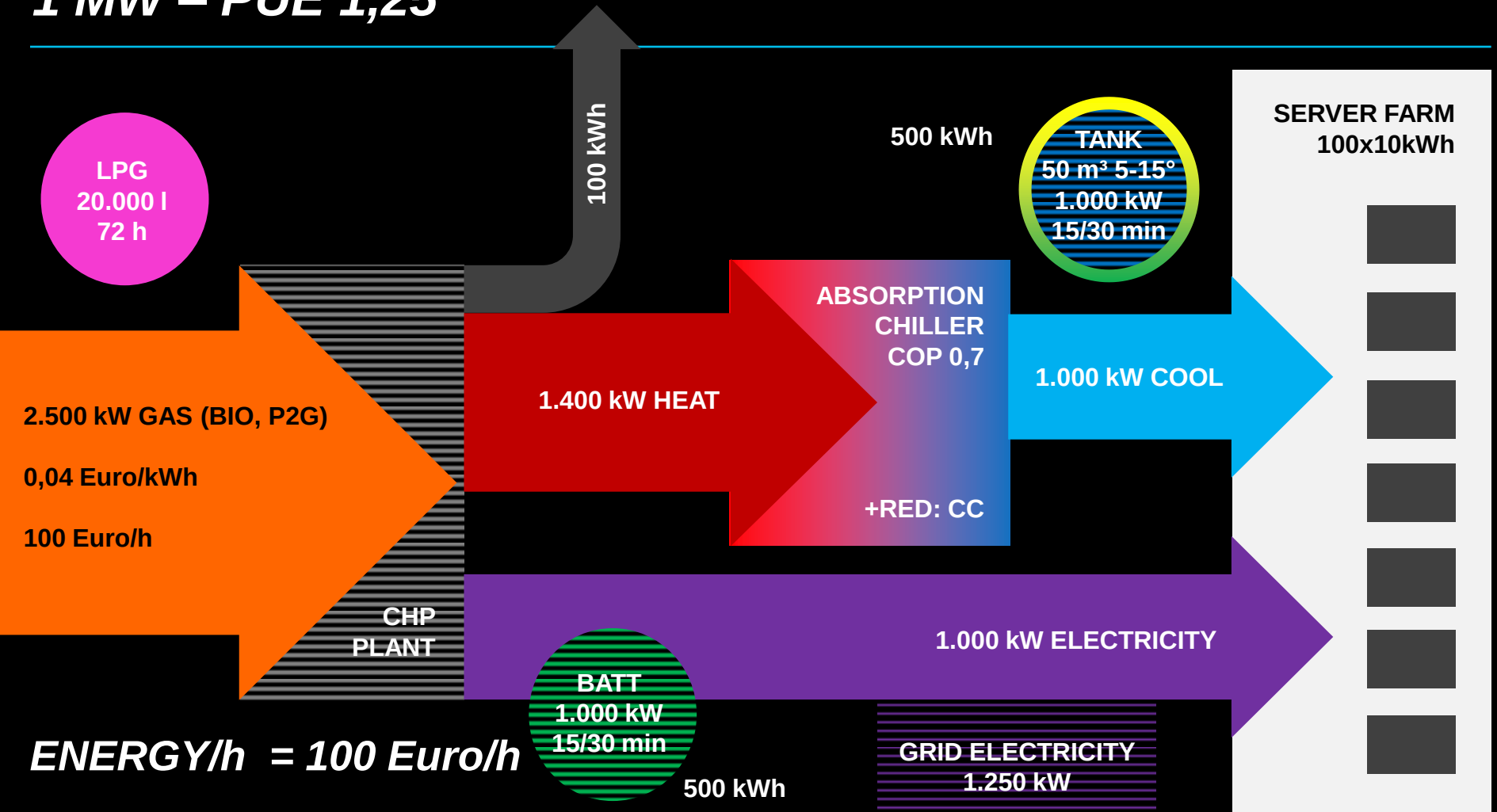
DATA CENTER - OPTION CHP:
1 MW – PUE 1,25

AECOM



DATA CENTER - OPTION CHP:
1 MW – PUE 1,25

AECOM



ENERGY/h = 100 Euro/h

COMPARING OPTIONS: 18 Mil. Euro

1 MW – PUE 1,25

	OPTION GRID	OPTION CHP	DELTA
ENERGY/h	150 Euro	100 Euro	50 Euro
	8.750 h/a	8.750 h/a	8.750 h/a
ENERGY/a	1,3 Mil. Euro	0,9 Mil. Euro	0,4 Mil. Euro
ENERGY/25a 2%	42,0 Mil. Euro	28,0 Mil. Euro	14,0 Mil. Euro
ENERGY/25a 6%	72,0 Mil. Euro	48,0 Mil. Euro	24,0 Mil. Euro

GREEN ENERGY: 18 Mil. Euro

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ELECTRICITY/a
1,25 MWh x 8.750 h/a
10.950 MWh/a

GAS/a
2,50 MWh x 8.750 h/a
21.900 MWh/a

3N -GREEN ENERGY

WIND:	6,5 Mil. Euro
PV:	9,6 Mil. Euro
BMP:	6,4 Mil. Euro
SUM:	22,5 Mil. Euro

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Thank You!

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