



Solutions+ Webinar: Valeo powertrain



SMART TECHNOLOGY FOR SMARTER MOBILITY

Agenda

1. Valeo SVA powertrain solutions
2. Demo city - 2020 status
3. Perspective

Why New Mobility and Special Vehicles Applications?



Growth opportunity for Valeo, but a new mindset is needed vs. passenger-car business: lower volumes? shorter time-to-market? new types of requirements?

48V Offer

 Proof of Concept
 In development
 Serial production

Markets

Micro urban electric mobility

up to 1kw continuous



Small urban electric mobility

up to 6.5kw continuous



Light urban electric mobility

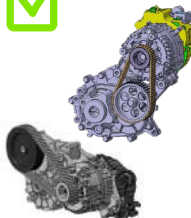
up to 14.3kw continuous



e-Drive system assembly



e-Bike4U



e-Access
Compatible
with iBSG



e-Ride4U
Compatible
with iBSG



e-Drive light
Compatible with
DMG



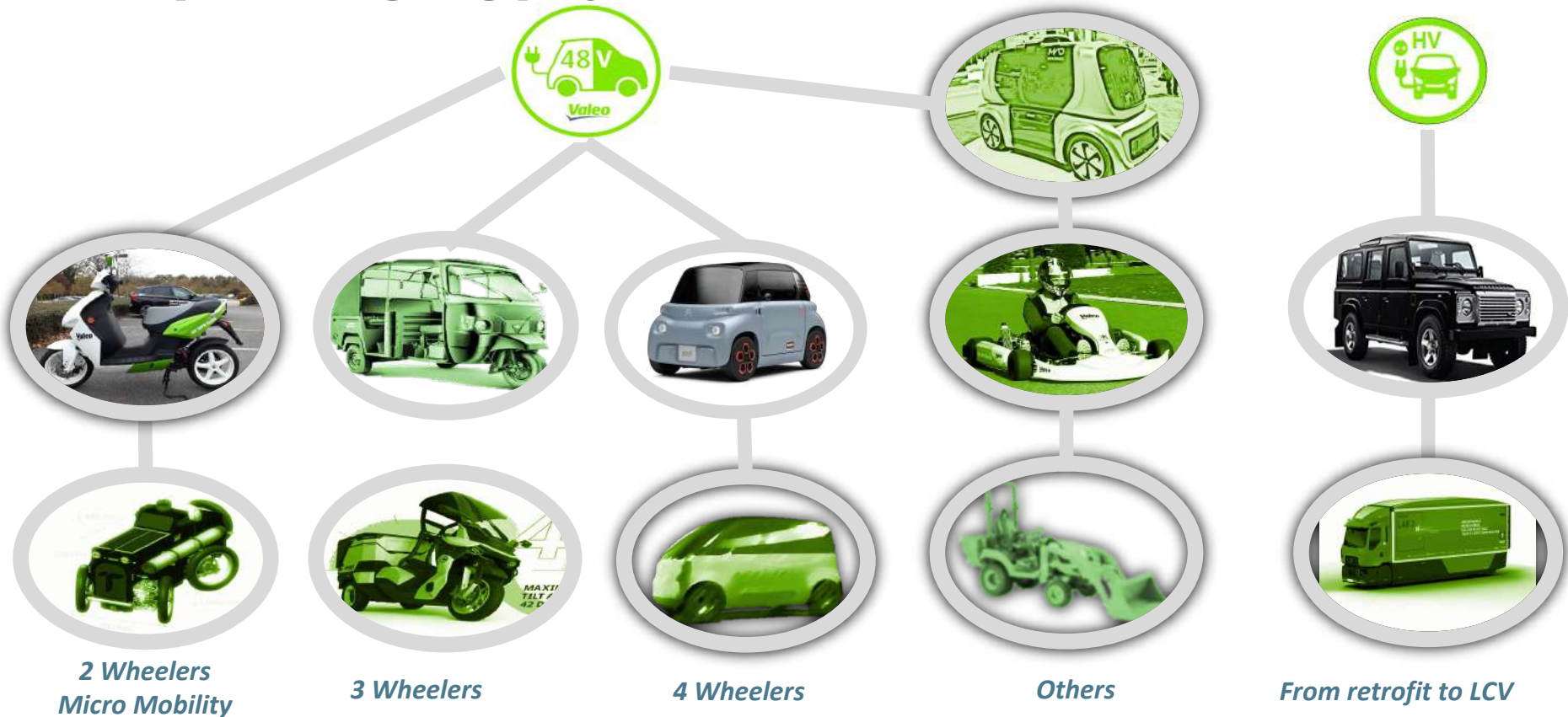
48V DC/DC Converter
1.8kW output



PCU



Example of on-going project



SVA for solutions+



From **ICE** public transport/delivery/shuttle

To adapted **EV** solutions



Experience in **retrofit** application and **system analysis**

Dedicated offer of **powertrain** well adapted to urban **small mobility**

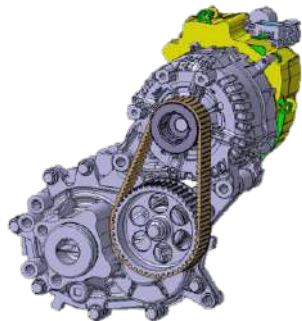
City needs

City	Vehicle type	Application	Characteristics
Kathmandu	e-tuktuk	Public transport	Max speed: 65kph Gross weight: 600kg Gradiability: 20%
Pasig	e-quad	Multipurpose small utility van	Max speed: 40kph Gross weight: 400kg Gradiability: 10%
Quito	e-quadricycle	Last mile freight	Max speed: 45kph Gross weight: 330kg Gradiability: 15%
Montevideo	e-3wheelers cargo	Urban logistics fleet	Max speed: 65kph Gross weight: 435kg Gradiability: 10%
	e-tricycle	Urban logistics fleet	Max speed: 65kph Gross weight: 680kg Gradiability: 12%

System simulations performed to choose the perfect fit solution in SVA portfolio



Requirements lead to one solution: **Valeo eAccess powertrain**

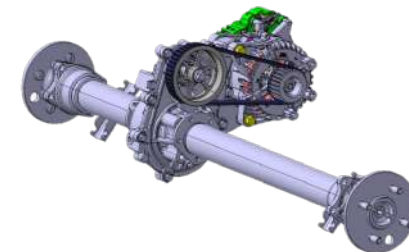


48V – Belt eDrive

Motor Compatibility	iBSG
Gear ratio	10 - 21: 1
Weight (kg)	22
feature	Open differential
Optional features	<ul style="list-style-type: none"> Locker system Rigid rear axle
Status	Mass production

Powertrain performance (air cooled)

Peak Output torque (Nm)	550 - 1100
Continuous Output torque (Nm)	160 - 350
Continuous power output (kW)	Up to 6.5
Peak power output (kW)	Up to 12.5
Oil quantity (cc)	300
Lifetime (hr)	>10 000
Maintenance (hr)	3500



Powertrains and user guides delivered to 3 city teams.
Next ⇒ Q/A live session with local teams

2021 planning

Demo extension to:

- Dar Es Salam
- Nairobi
- Kigali



Shipment of 3 additional powertrains

Montevideo (x2)

Dar Es Salam

2 wheelers powertrain study

Study integration of off the shelf solution in city needs

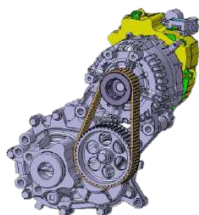


eTuk Tuk delivery

Deliver a few operational vehicle to start demo in the concerned cities

2 wheelers powertrain delivery

+ User-guides and learning





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