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# Pedelec legislation at the European level

Ceri Woolsgrave, ECF, Dublin, 2019



# Electric Powered Assisted Cycle



- < 25 km/h assistance cuts out
- < Less 250 Watts Power
- *Pedal* assisted – no pedal no power
- Regulated for manufacturers like bicycles at CEN/ISO EN 15194– **not type approved**
- Treated like bicycles across EU

- Average speed 1-3 km/h higher than bicycle



# “Speed Pedelec”



- < 45 km/h assistance cuts out
- < Less 4kW Power
- *Pedal* assisted – no pedal no power
- Regulated like other motor vehicles - **type approved**
- Treated like moped/scooter across Member states

- Longer distances can be reached
- Average speed around 30 km/h

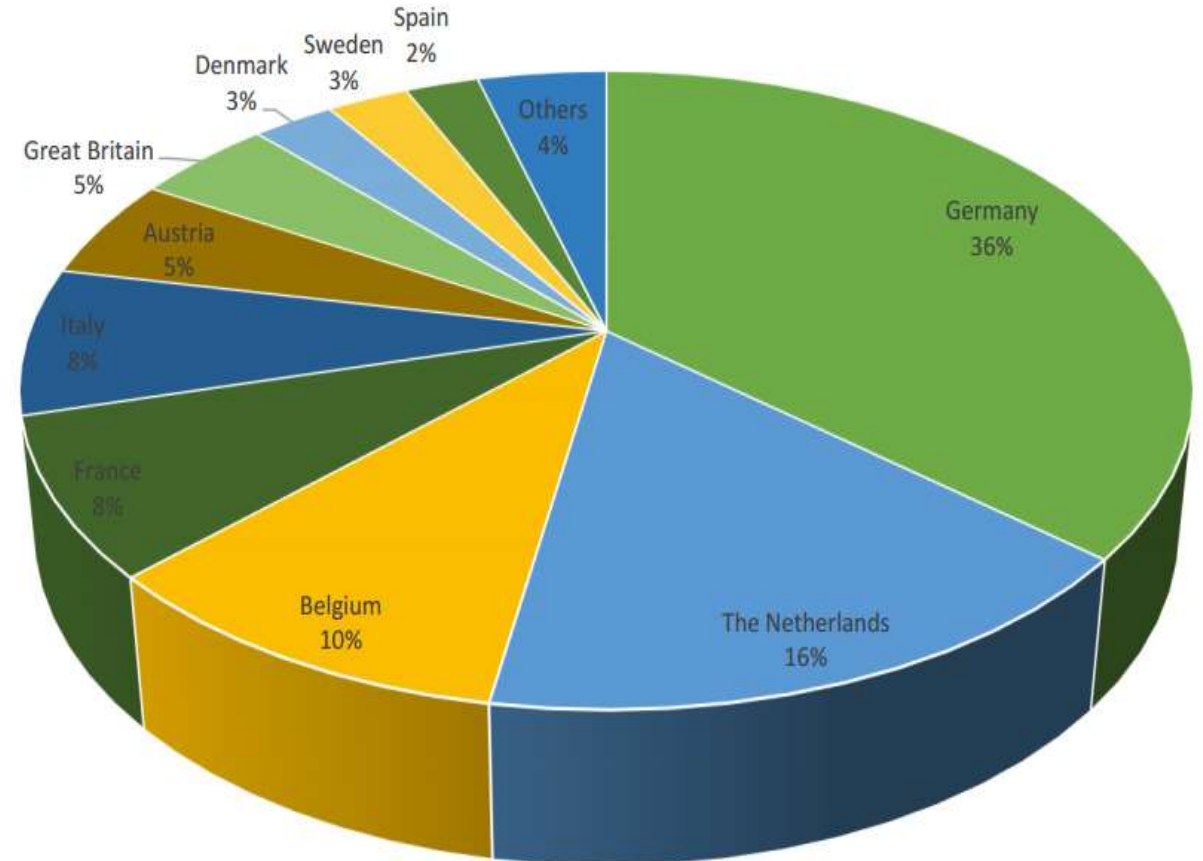
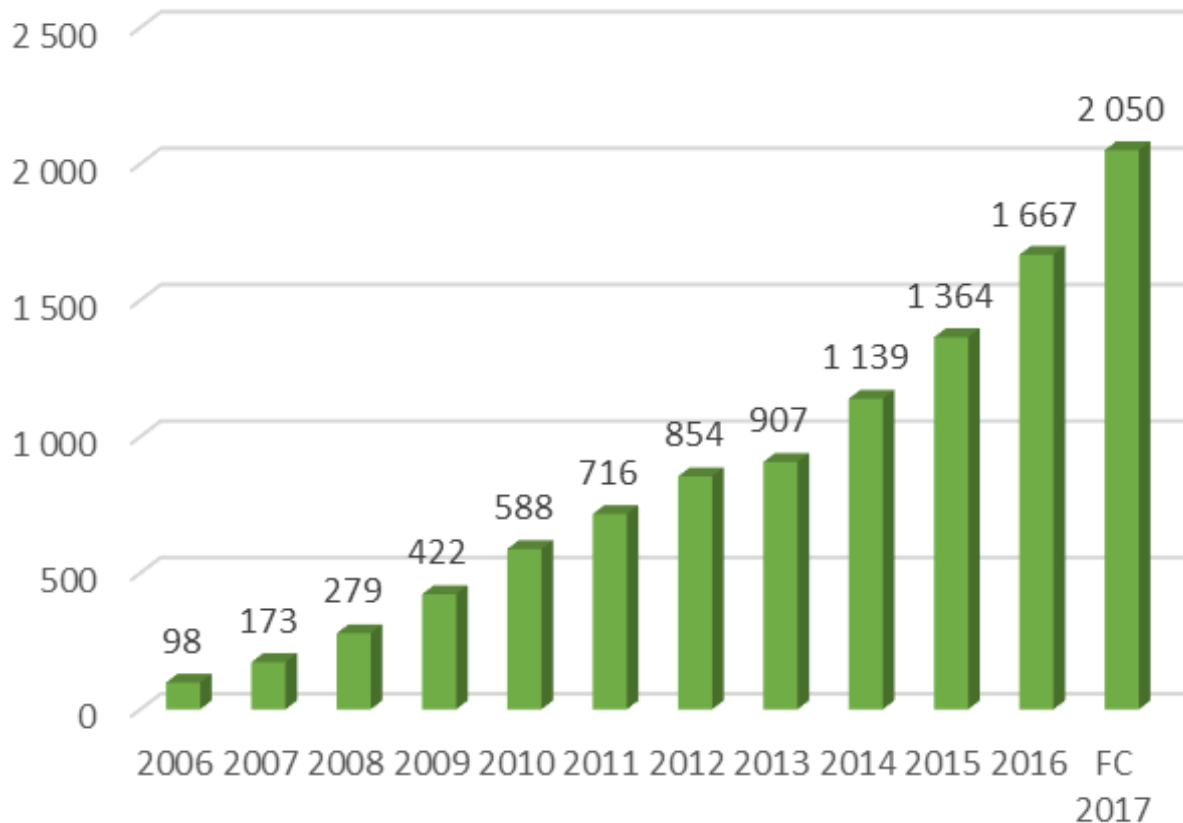


# EPAC Sales EU28



Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	FC 2017
EPAC Sales (x 1,000)	98	173	279	422	588	716	854	907	1 139	1 364	1 667	2 050
Evolution (%)		76,53	61,27	51,25	39,34	21,77	19,27	6,21	25,58	19,78	22,15	23,01

3 million EU EPAC sales forecast for 2020





# E-bikes: Key benefits

## • Keep cycling benefits:

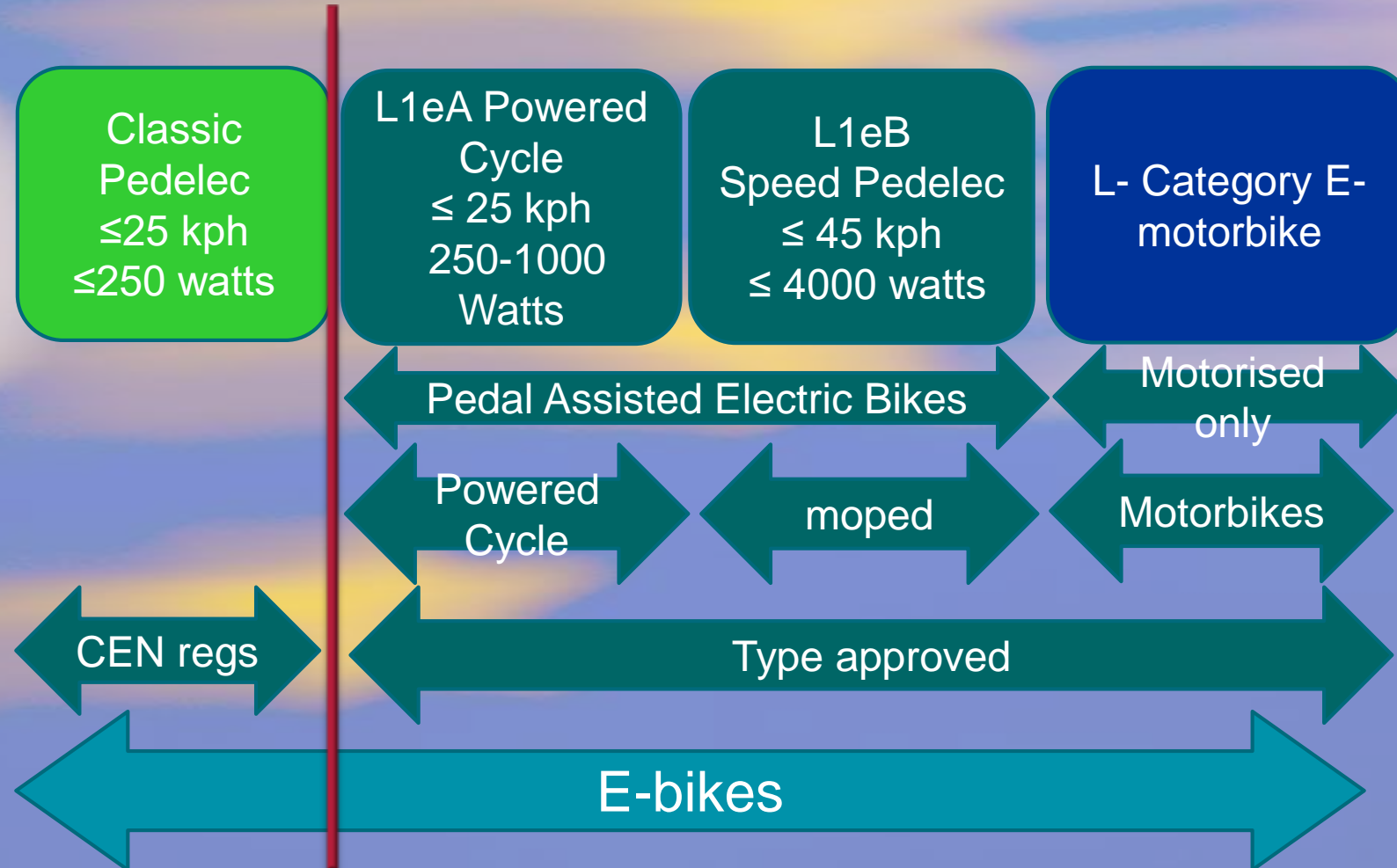
- Health
- Reliability
- Congestion busting
- Cost
- Storage
- Environment
- Combined mobility
- No license
- Use cycle infrastructure
- Bike sharing infrastructure

## • Remove/reduce some cycling barriers:

- Range
  - Now 10-20km as standard
- Hills
- Heat
- Strength concerns
  - Age, gender, disability
- Perception of Safety
  - Safe start
- Slowness
  - 25km/h – 45km/h
- Loads/goods / passengers



# EU Electric Bike Regulations



# Inconsistency in EU legislative definitions of EPACS and electric bikes



	EU Type Approval 2013	EU driving license Directive 2006	General state of Member States road rules (are these treated as bicycles?) - now	CPA 2008 - EU Statistical Classification of Products by Activity, as basis for EU VAT rates reform	EU insurance Directive under Commissions plans - upcoming
"Conventional" non-motorised bicycles	Exempt = bicycle	Exempt = bicycle	Exempt = bicycle	Exempt from standard VAT obligation (CPA subcategory 30.92 Bicycles (not motorised) + invalid carriages)	Exempt = bicycle
250 watt EPACs	Exempt = bicycle	Exempt = bicycle	Exempt = bicycle	Included in standard VAT obligation (CPA subcategory 30.91.13 (Motorcycles n.e.c.; side-cars))	Included (motor Vehicle)
250 watt cargo bikes	Exempt = bicycle	Exempt = bicycle	Exempt = bicycle	Included in standard VAT obligation (CPA subcategory 30.91.13 (Motorcycles n.e.c.; side-cars))	Included (motor Vehicle)
Higher Powered Speed pedelecs	Included L1-eB (motor Vehicle)	Unclear as two definitions are in opposition. Plus points to old legislation	mainly moped motor vehicle	Included in standard VAT obligation (CPA subcategory 30.91.13 (Motorcycles n.e.c.; side-cars))	Included (motor Vehicle)
Higher power cargo bikes	Included L1-eA (motor Vehicle)	Unclear as two definitions are in opposition. Plus points to old legislation	mainly moped motor vehicle	Included in standard VAT obligation (CPA subcategory 30.91.13 (Motorcycles n.e.c.; side-cars))	Included (motor Vehicle)
"Twist and go" non-pedalled electric bikes	Included L1-eA (motor Vehicle)	Exempt as long as less than 25 km/h	mainly moped motor vehicle	Included in standard VAT obligation (CPA subcategory 30.91.13 (Motorcycles n.e.c.; side-cars))	Included (motor Vehicle)
All other higher power electric bikes	Included as motor vehicle	Included as Motor Vehicle	Treated as motor vehicle	Included in standard VAT obligation (CPA subcategory 30.91.13 (Motorcycles n.e.c.; side-cars))	Included as Motor vehicle
Electric cars	Included as motor vehicle	Included as motor vehicle	Included as motor vehicle	Exempt from standard VAT obligation (CPA subcategory 29.10.24 Other Vehicles for the transport of persons)	Included as motor vehicle



# Motor Vehicle Insurance Directive



- Original Directive “...any motor vehicle intended for travel on land and propelled by mechanical power but not running on rails, and any trailer whether or not coupled”
- European Commission “use of a vehicle’ means any use of such vehicle...consistent with the normal function of that vehicle...irrespective of the terrain on which the motor vehicle is used and of whether it is stationary or in motion







# European Parliament restores sanity



- European Parliament - “This Directive shall only apply to vehicles covered by Regulation (EU) 2018/858\*, Regulation (EU) No 167/2013\*\* or Regulation (EU) No 168/2013”
- Type Approval now defines the scope
- If countries wish to have a national insurance for other vehicles then so be it





# Pedelecs/EPAC $\neq$ motor vehicle!

1. EPACs are not motorised vehicles
  - a) Bicycles with assist – no pedal no power – Motor Vehicle in no other regulation
2. Inclusion would act as a barrier to EPACs
  - a) Need to keep it as bicycle like as possible
3. EPACs are not an overly risky mode of transport
  - a) They are as risky for others as bicycles – completely different risk that motor vehicles
4. Inclusion will increase administrative burden
  - a) Changing insurance regime or be criminalised
  - b) Strict liability
  - c) Most already insured





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# Thank you

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Ceri Woolsgrove, ECF, Dublin Velo-city

