

# Transport bioenergy

*The role of biogas and bioliquids for climate action in transport*

James Cogan - Ethanol Europe

IrBEA National Bioenergy Conference

26 February 2020

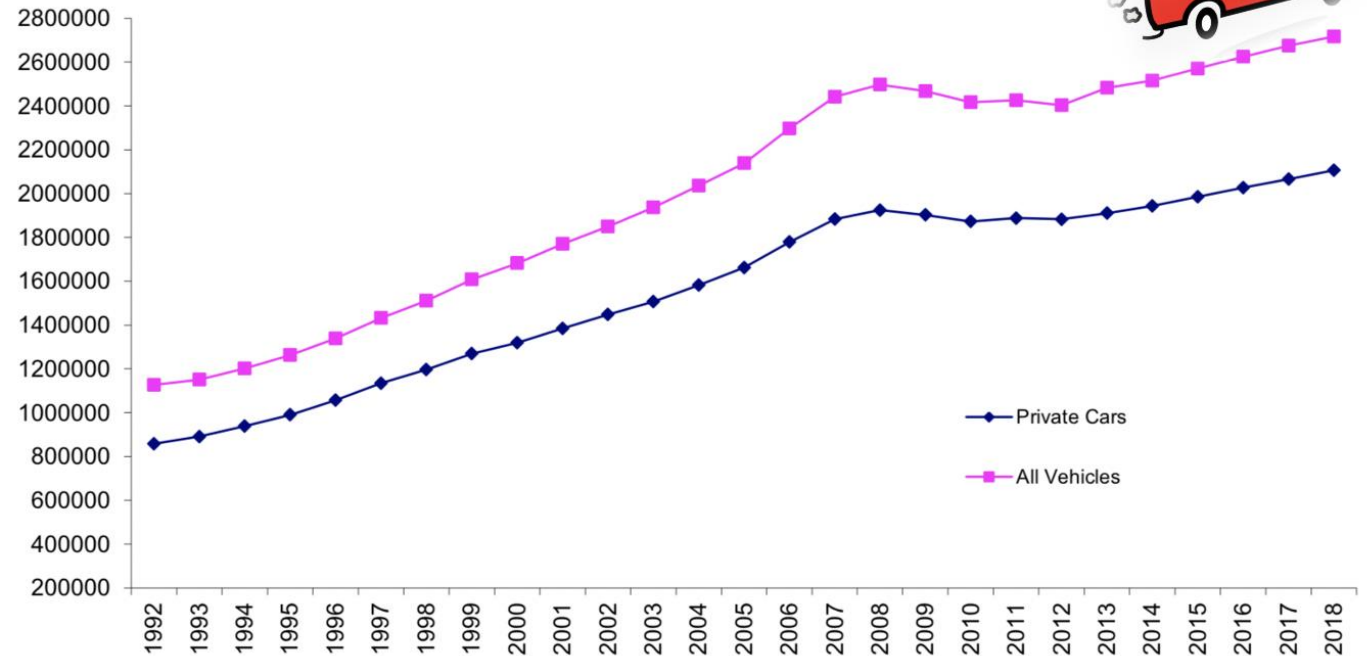
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# Ireland transport energy

- Steady 2% fleet growth
- Energy demand up 3% pa
- Emissions up 3% pa
- 284,000 registrations last year
- Just 1 in 60 is EV/PHEV
- Fleet grew 42,000
  - Net of de-registrations

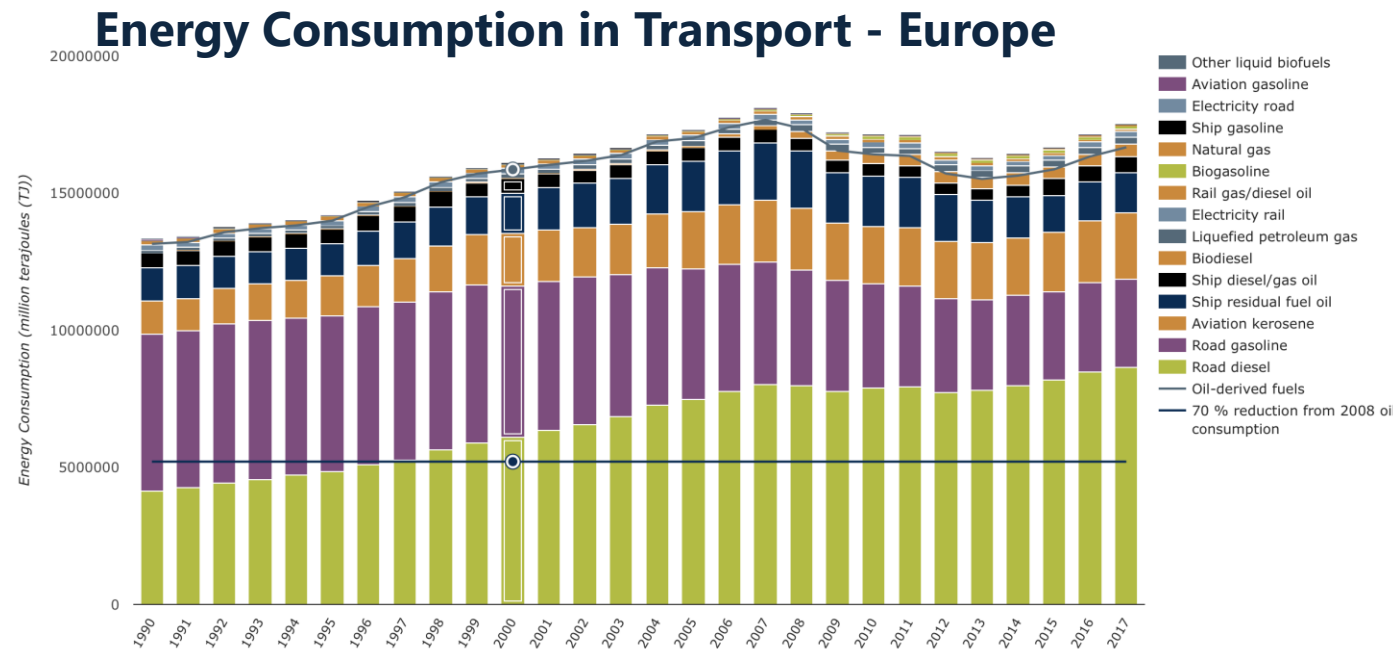
Ireland Vehicle Statistics 1992 - 2018



DTTAS transport bulletin for 2018

# Similar Picture in Europe

- Transport energy demand tracking economic output
- Fleet grew 40 million units in last decade
- Oil demand and emissions up 33% since 1990
- Not much different in the rest of the world!

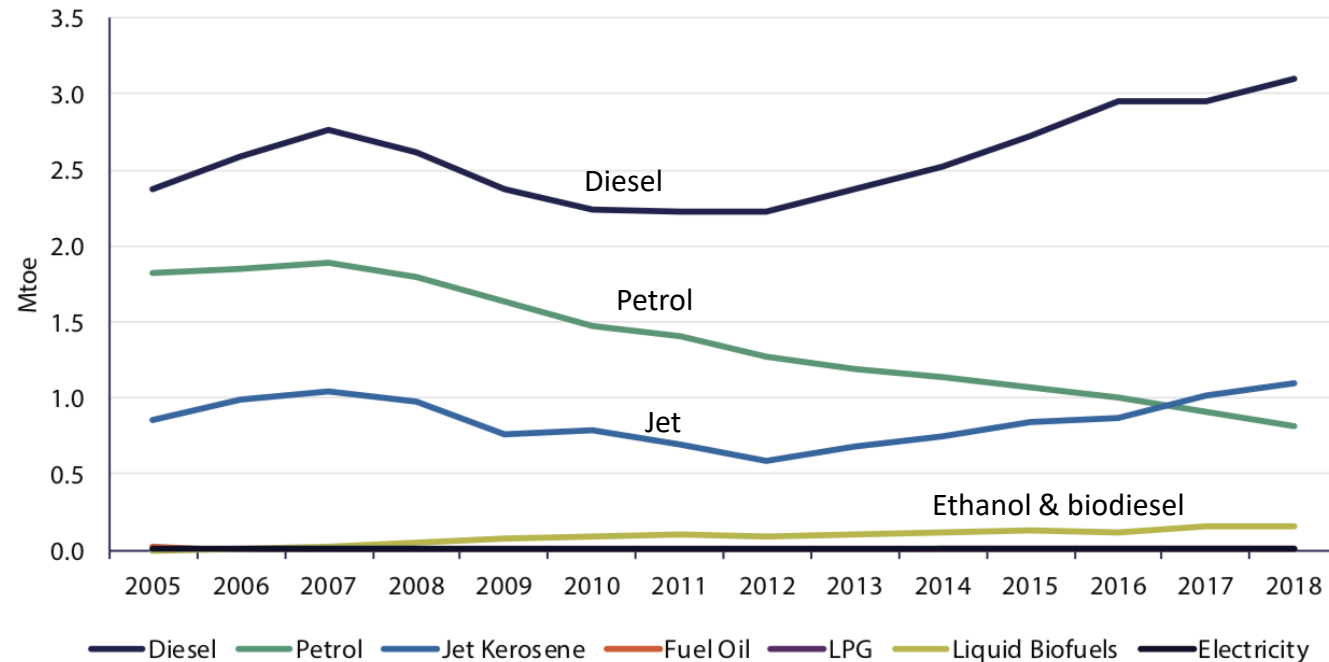


[www.eea.europa.eu/data-and-maps/indicators/transport-final-energy-consumption-by-mode/assessment-10](http://www.eea.europa.eu/data-and-maps/indicators/transport-final-energy-consumption-by-mode/assessment-10)

# Renewable transport energy Ireland

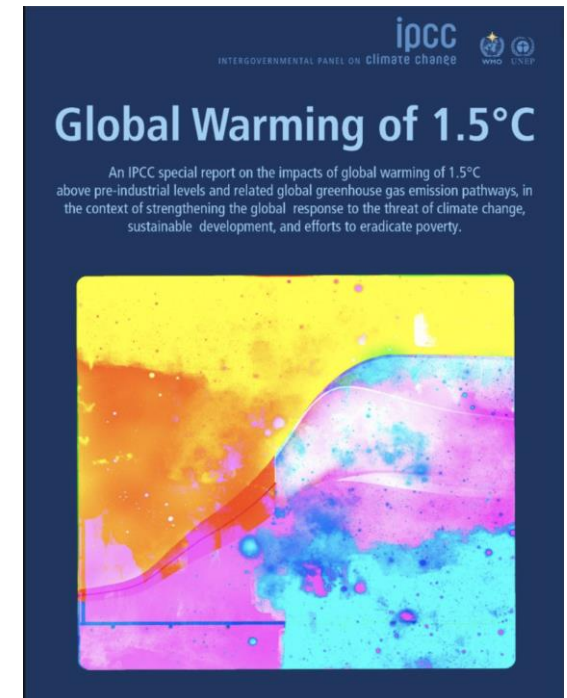
- Transport is 3% renewable\*
  - ethanol, tallow, Used Cooking Oil
  - official figures higher due to “double counting”
- Petrol is at E5, 5% bioethanol blended into every litre
- Electricity 0.1%
- Biodiesel must drop by 1/3<sup>rd</sup> by law next year
  - to reduce fraud\*\* involving virgin palm oil passed off as Used Cooking Oil

**Final consumption of transport by fuel, Ireland 2018**



# Best available science

- UN Climate Report\* 2018 says, for 1.5°C to be achieved
  - Oil will comprise half of transport energy in 2050
  - Electricity will account for a quarter
  - 15% or more from biofuels
- UN Land & Climate Report\*\* 2019 says
  - Biofuels from the land vital for climate progress
  - Waste and excess consumption the big threats to sustainable land use
  - Good regulation essential in any case



\* [www.ipcc.ch/site/assets/uploads/2018/11/sr15\\_chapter4\\_supplementary\\_materials.pdf](http://www.ipcc.ch/site/assets/uploads/2018/11/sr15_chapter4_supplementary_materials.pdf)

\*\* [www.ipcc.ch/srccl/](http://www.ipcc.ch/srccl/)

# Biomethane Opportunity for HGVs

- Renewable Natural Gas (Biomethane) economic option for HGVs, GNI starting to install CNG fuelling points
- Produced by AD from organic wastes and agricultural feedstocks
- Raw Biogas upgraded, injected into national Gas Grid
- IrBEA/Cre policy paper envisages 65 to 200 MW of renewable gas in Ireland by 2030, with a phased implementation across all regions
- One facility already capable in Kildare
- Inadequate incentive to-date
- Could reduce GHG emissions by 9 % in transport sector by 2030
- Big co-benefits to struggling agriculture sector

# Prospects for 2030

- Climate Action Plan: 45-50% emissions cuts in transport and a million EVs per NECP
- Backdrop....emissions rising 3% pa
- No carrots or sticks proposed by any party in GE2020, lots of aspirations
- One million EVs by 2030 will cost €10 billion in grants and foregone tax
- Ireland targeting 70% renewable electricity 2030
- The BOS consultation envisages E10 in petrol by 2030



## **This was supposed to be Ireland's climate election - what happened?**

Country was among first to declare climate emergency but health and housing take priority at ballot box



# Immediate actions

- Introduce E10 ethanol immediately: It's a no brainer
- Establish 15% transport bioenergy strategy
  - in line with UN report indications
- Incentivise Biomethane deployment for diesel replacement in HGVS
- Recalibrate Biofuels Obligation Scheme to account for loss of 50 million litres of “fraudulent” Used Cooking Oil from Jan 2021
- Establish delivery taskforce to achieve
  - bringing focus and technology and regulatory skills
- De-incentivise continued use of fossil oils in transport, set realistic goals.