Varying car tax by weight & the case to also consider width

T&E car tax webinar, 20 Feb 2024

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Contents

**Taxing cars by weight**
- Background / rationale
- Summary of registration & circulation weight taxes in Europe
- Recommendations on taxing weight

**Taxing cars by width**
- Taxing vehicle dimensions, focusing on width
Key light duty passenger vehicle trend: SUVisation

SUV sales in Europe have continued to grow over the past 10 years

Source: Jato Dynamics

European cars are getting wider

Source: ICCT
Why tax weight?

Key **advantages** to taxing weight (e.g. in addition to CO2)

- **Discourage larger vehicle sizes** (using weight as a reasonable proxy for size*)
- **PHEV data** on CO2 is often **misleading** (which leads to under-taxation of PHEV CO2)
- **Can be applied** to electric vehicles (EVs)
- **Compensate** for the fall in CO2-related tax

Weight-based reforms can evolve over time to improve effectiveness as acceptance grows.

*Electric vehicles weigh more due to battery mass; see next slide*
Higher threshold of application for electric

Comparing vehicles which are alike in size, such as:

- Peugeot 208 v. e-208 (see right)
- VW Golf v. ID.3, and
- VW Tiguan v. ID.4

Indicates a weight difference between ICE-only and full EV models of **400 kg approx.**

We recommend **starting EV weight taxation 300 kg higher than ICE**, reducing over time with greater battery energy efficiency.
Countries that tax cars by weight

Variation of car **registration/acquisition** tax by weight:
- France
- Norway
- Estonia (proposed for 2025)

Variation of car **circulation/ownership** tax by weight:
- the Netherlands
- Switzerland
- Finland
France (from 1.1.24) taxes stepwise per kg:
- €10 from 1,600 to 1,799 kg
- €15 from 1,800 to 1,899 kg
- €20 from 1,900 to 1,999 kg
- €25 from 2,000 to 2,100 kg
- €30 per kg over 2,100 kg

How much per kg?

### Weight-based car taxes in Europe (by type & market size)

<table>
<thead>
<tr>
<th>Country</th>
<th>Type of tax</th>
<th>First threshold</th>
<th>Applied to PHEVs</th>
<th>Applied to BEVs</th>
<th>Tax increase with weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>Acquisition</td>
<td>1,600 kg</td>
<td>In 2025</td>
<td>No</td>
<td>Progressive</td>
</tr>
<tr>
<td>Norway</td>
<td>Acquisition</td>
<td>500 kg</td>
<td>Yes</td>
<td>Yes</td>
<td>Progressive</td>
</tr>
<tr>
<td>Estonia 1</td>
<td>Acquisition</td>
<td>2,000 kg</td>
<td>Yes, from 2,400 kg</td>
<td>Yes, from 2,400 kg</td>
<td>Flat</td>
</tr>
<tr>
<td>Netherlands</td>
<td>Ownership</td>
<td>1 kg</td>
<td>Phasing out reduced rate</td>
<td>Phasing out exemption</td>
<td>Progressive</td>
</tr>
<tr>
<td>Switzerland</td>
<td>Ownership</td>
<td>1 kg</td>
<td>Small reduced rate</td>
<td>Large reduced rate</td>
<td>Regressive</td>
</tr>
<tr>
<td>Finland</td>
<td>Ownership</td>
<td>100 kg [2]</td>
<td>Small reduced rate</td>
<td>Large reduced rate</td>
<td>Flat</td>
</tr>
</tbody>
</table>

[1] Proposed from 1.1.25  
[2] Not applied to petrol cars
French tax only covers heaviest 6% of ICE sales

T&E advocates reducing the 1600 kg threshold to 1300 kg to better shape sales.

Source: Analyse T&E des données d'immatriculation de voitures thermiques neuves (base SIV)
Recommendations on weight tax (T&E)

- **Registration** weight tax better shapes purchasing (compared to circulation / annual)
- An **EV allowance** is vital to support the transition (+300 kg in the mid 2020s, reviewed over time)
- Rate should **increase with weight** (and not decrease, or be capped!)

**NB:** To influence consumers' purchasing decisions, **acquisition taxes are more effective** than ownership taxes. This is linked to myopia, i.e. consumers tend to attach **greater importance to short-term costs and benefits**, while viewing taxes in future years with uncertainty (T&E’s Good Tax Guide, 2022).
Malta taxes a vehicle dimension: length

Tax at first registration varied by length (as well as CO2):
- The rate rises incrementally with greater length (see table)
- After 3.45m, the bands generally span 18 to 20 cm
- Calculation formula incorporates valuation, actual length, and band %
- Land Rover Defender 130 valued at €90k will pay €1,640 (€90,000 * 5,358 * .0034%)
- Clio valued at €25,000 will pay €284 (€25,000 * 4,053 * .0028%)
Stronger case to tax width

- Increasing width **crowds others out** by taking space from the footpath, the roadway - or both.

- There **can be a case for 3 rows of seating** in some cars (large families), increasing length. No comparable argument regarding width.

Wide SUVs leave too little space for other road users

**Average new car width:** 180cm (200cm with mirrors)

**Mega SUV width:** 200cm (220cm with mirrors)
## Width tax options (multi-input v. flat rate)

<table>
<thead>
<tr>
<th>Width (mm)</th>
<th>Value * Width * Band %</th>
<th>Amount payable under 2 width tax options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>1,730</td>
<td>Exempt</td>
</tr>
<tr>
<td>1,731</td>
<td>1,800</td>
<td>0.0003%</td>
</tr>
<tr>
<td>1,801</td>
<td>1,820</td>
<td>0.0005%</td>
</tr>
<tr>
<td>1,821</td>
<td>1,850</td>
<td>0.0026%</td>
</tr>
<tr>
<td>1,851</td>
<td>1,880</td>
<td>0.0028%</td>
</tr>
<tr>
<td>1,881</td>
<td>1,920</td>
<td>0.0030%</td>
</tr>
<tr>
<td>1,921</td>
<td>1,950</td>
<td>0.0032%</td>
</tr>
<tr>
<td>1,951</td>
<td>1,990</td>
<td>0.0033%</td>
</tr>
<tr>
<td>1,991</td>
<td>2,000</td>
<td>0.0034%</td>
</tr>
<tr>
<td>2,001</td>
<td></td>
<td>0.0050%</td>
</tr>
</tbody>
</table>

How 'Multi-input' is calculated: Vehicle value * Actual width * band %

How 'Flat rate' is calculated: Actual length minus 1730mm * €10 per mm
Thank you
Annex
France: weight tax

Covering the EU’s 2nd largest market, it’s paid upon first registration:

- Applied from **1600 kg since 1.1.24** (6% of new sales)
  (Introduced in 2022 at 1800 kg, 1.6% of sales)

- Extension to PHEVs on 1.1.25

- EVs currently exempt but remains under review
  (in Paris EVs over 2000 kg will soon pay more to park)

- From 1.1.24, applied stepwise per kg:
  - €10 from 1,600 to 1,799 kg
  - €15 from 1,800 to 1,899 kg
  - €20 from 1,900 to 1,999 kg
  - €25 from 2,000 to 2,100 kg
  - €30 per kg over 2,100 kg

- We advocate reducing the 1600 kg threshold to 1300 kg to better shape sales
Norway

- Weight tax paid at first registration

- Application threshold of 500 kg

2 part system:
- Base rate of €1.15 (12.98 NOK) per kg over 500 kg. Paid by all powertrain types, i.e. incl EVs

- On top of the base rate, a car with an ICE also pays a supplementary weight tax as per the bands & rates of the table (see right)

<table>
<thead>
<tr>
<th>Lower range</th>
<th>Upper range</th>
<th>Tax (€/kg)</th>
<th>Cumul. max €</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>500</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>500</td>
<td>1,200</td>
<td>2.56</td>
<td>1,792</td>
</tr>
<tr>
<td>1,200</td>
<td>1,400</td>
<td>6.37</td>
<td>3,066</td>
</tr>
<tr>
<td>1,400</td>
<td>1,500</td>
<td>22.55</td>
<td>5,321</td>
</tr>
<tr>
<td>1,500</td>
<td></td>
<td>23.15</td>
<td></td>
</tr>
</tbody>
</table>

Worked examples
- Renault ZOE: **€1,239** (1577 kg - 500 kg * €1.15)
- Tesla Model Y: **€1,728** (2003 kg - 500 kg * €1.15)
- Renault Clio (petrol): **€2,516**, base tax €780 & €1,736 ICE element [1,178 kg]
- Land Rover Defender 130: **€35,389**, base €2,519 & €32,870 ICE element [2,690 kg]
Estonia

Thresholds:
- 2,000 kg for ICE
- 2,400 kg for EVs

Rate per kg:
- €4 per kg above threshold (to a max of €4,000 for ICE; €4,400 for EV)

Worked examples (weight tax component of the reg. charge for Porsche models shown right):
- Cayenne: €3,440 of €16,565
- Taycan: €1,920 of €2,200

<table>
<thead>
<tr>
<th>Model</th>
<th>Age</th>
<th>CO2/g/kg</th>
<th>Weight</th>
<th>Annual tax</th>
<th>Registration fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Porsche Cayenne</td>
<td>2019</td>
<td>299g</td>
<td>2860kg</td>
<td>€1064</td>
<td>€16,565</td>
</tr>
<tr>
<td>Audi Q7</td>
<td>2019</td>
<td>221g</td>
<td>2850kg</td>
<td>€748</td>
<td>€10,285</td>
</tr>
<tr>
<td>Honda-CRV</td>
<td>2019</td>
<td>196g</td>
<td>2350kg</td>
<td>€450</td>
<td>€6,365</td>
</tr>
<tr>
<td>VW Passat</td>
<td>2019</td>
<td>150g</td>
<td>1990kg</td>
<td>€149</td>
<td>€2,205</td>
</tr>
<tr>
<td>Skoda Octavia</td>
<td>2019</td>
<td>117g</td>
<td>1808kg</td>
<td>€50</td>
<td>€885</td>
</tr>
<tr>
<td>Nissan Leaf</td>
<td>2021</td>
<td>N/A</td>
<td>1530kg</td>
<td>€50</td>
<td>€300</td>
</tr>
<tr>
<td>Tesla Model 3</td>
<td>2021</td>
<td>N/A</td>
<td>2139kg</td>
<td>€50</td>
<td>€300</td>
</tr>
<tr>
<td>Porsche Taycan</td>
<td>2021</td>
<td>N/A</td>
<td>2880kg</td>
<td>€242</td>
<td>€2,200</td>
</tr>
</tbody>
</table>

Table: Estonian Finance Ministry / err.ee
Car circulation taxes varied by weight
The Netherlands

- Weight tax is a circulation tax, payable annually.
- Applied from 1 kg, with band intervals of 100 kg from 500 kg to 3,050 kg.
- Some variation by region.
- Diesel vehicles in Amsterdam:
  -- Approx 1t: €1,100 - €1,280
  -- 2.5 to ~3t: €3,400 - €4,440
- Lower rates applied to petrol (v. diesel).
- Reduced rate applied to PHEVs to be phased out by 2026.
- Full EVs remain exempt in 2024, but are set to pay at 25% in 2025, and the full rate from 2026.

NB: To influence consumers' purchasing decisions, acquisition taxes are more effective than ownership taxes. This is linked to myopia, i.e. consumers tend to attach greater importance to short-term costs and benefits, while viewing taxes in future years with uncertainty (T&E’s Good Tax Guide, 2022).
Switzerland

- Circulation weight tax, paid annually
- Varies by Canton
- **Not a good precedent as the rate decreases as weight increases** (see table). The rates go down above 1,000 kg, declines further above 2,000 kg and reduces further still above 3,000 kg (comment: this needs reform)

**Worked example** (CHF converted to €)
- 2,000 kg ICE: **€473**
- Roughly half rate for electric
- 2,000 kg full EV: **€235**
Company cars: boosting EVs of reasonable size - building on a Belgian idea

- Belgium is phasing out depreciation allowances on ICE and hybrid company cars
- After stepwise reductions in 2024 and 2025, **depreciation allowances will be completely removed for new ICE / hybrids from 1.1.2026**
- With this change, Belgium has doubled its EV roll-out (see chart)
- Across the EU, company car EV roll-out is lagging private sales of EVs
- To get **reasonable-sized EVs in the corporate fleet**, the depreciation allowance for BEVs can be varied by weight
Note: Wallonia’s planned reform of its circulation tax (from 1.7.25) is partly weight-based.

However, it is not considered here due to its failure to have regard to the heavier weight of EVs and its likely negative impact on EV deployment.