In November 2021, there were about 0.7 million passenger cars newly registered in Europe. Year-to-date, new registrations reached almost 9.1 million, which is about the same amount during the same time period in 2020. For compliance with the EU CO₂ standards for new passenger cars, manufacturers can form pools. Towards the end of 2021, some manufacturer pool compositions changed. For example, Ford and Volvo dissolved their previously shared pool while Jaguar Land Rover joined the already existing Tesla-Honda pool. Having joined the newly formed Stellantis pool, FCA no longer exceeds its 2021 CO₂ target. In fact, all manufacturer pools are on track for (over) achieving their respective CO₂ targets, with the average year-to-date CO₂ level at 115 g/km (WLTP). One key reason for the observed decrease in type-approval CO₂ levels is the continued uptake of battery electric vehicles and plug-in hybrids. In November, battery electric vehicles accounted for 15% of new car registrations, and plug-ins for another 10%. Year-to-date, both vehicle types accounted for 9% each. The Tesla-Honda-JLR pool was leading, with an approximate 54% share of battery electric vehicles year-to-date. Meanwhile, only about 1% of the Mazda-Subaru-Suzuki-Toyota pool’s new car sales were battery electric.

### Table 1. New passenger car registrations, by manufacturer pool.

<table>
<thead>
<tr>
<th>Manufacturer Pool</th>
<th>Nov 2021</th>
<th>Nov 2020</th>
<th>YTD 2021</th>
<th>YTD 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>VW Group</td>
<td>157,402</td>
<td>-32%</td>
<td>2,299,558</td>
<td>-1%</td>
</tr>
<tr>
<td>Stellantis</td>
<td>150,787</td>
<td>-26%</td>
<td>1,994,069</td>
<td>0%</td>
</tr>
<tr>
<td>Renault-Mitsubishi</td>
<td>103,202</td>
<td>-16%</td>
<td>1,136,951</td>
<td>-12%</td>
</tr>
<tr>
<td>Mazda-Subaru-Suzuki-Toyota</td>
<td>66,705</td>
<td>-19%</td>
<td>871,724</td>
<td>13%</td>
</tr>
<tr>
<td>BMW</td>
<td>50,488</td>
<td>-20%</td>
<td>614,800</td>
<td>4%</td>
</tr>
<tr>
<td>Daimler</td>
<td>46,080</td>
<td>-30%</td>
<td>508,899</td>
<td>-11%</td>
</tr>
<tr>
<td>Hyundai</td>
<td>37,866</td>
<td>30%</td>
<td>395,814</td>
<td>21%</td>
</tr>
<tr>
<td>Kia</td>
<td>34,009</td>
<td>20%</td>
<td>376,944</td>
<td>18%</td>
</tr>
<tr>
<td>Ford</td>
<td>27,847</td>
<td>-41%</td>
<td>400,244</td>
<td>-16%</td>
</tr>
<tr>
<td>Volvo</td>
<td>19,143</td>
<td>-16%</td>
<td>222,222</td>
<td>5%</td>
</tr>
<tr>
<td>Tesla-Honda-JLR</td>
<td>19,025</td>
<td>31%</td>
<td>200,500</td>
<td>25%</td>
</tr>
<tr>
<td>Other</td>
<td>6,340</td>
<td>94%</td>
<td>52,317</td>
<td>60%</td>
</tr>
<tr>
<td><strong>ALL</strong></td>
<td>718,894</td>
<td>-21%</td>
<td>9,074,042</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Table 2. Share of plug-in hybrid and battery electric passenger cars, by manufacturer pool.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tesla-Honda-JLR</td>
<td>67%</td>
<td>6%</td>
<td>54%</td>
<td>7%</td>
<td>40%</td>
<td>3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Renault-Mitsubishi</td>
<td>19%</td>
<td>5%</td>
<td>10%</td>
<td>4%</td>
<td>8%</td>
<td>3%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hyundai</td>
<td>18%</td>
<td>7%</td>
<td>13%</td>
<td>6%</td>
<td>14%</td>
<td>1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Volvo</td>
<td>17%</td>
<td>42%</td>
<td>10%</td>
<td>37%</td>
<td>6%</td>
<td>31%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kia</td>
<td>16%</td>
<td>13%</td>
<td>11%</td>
<td>12%</td>
<td>9%</td>
<td>9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daimler</td>
<td>16%</td>
<td>28%</td>
<td>12%</td>
<td>24%</td>
<td>6%</td>
<td>16%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VW Group</td>
<td>16%</td>
<td>10%</td>
<td>10%</td>
<td>9%</td>
<td>7%</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>AVERAGE</strong></td>
<td>15%</td>
<td>10%</td>
<td>9%</td>
<td>9%</td>
<td>6%</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>15%</td>
<td>23%</td>
<td>7%</td>
<td>11%</td>
<td>4%</td>
<td>1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BMW</td>
<td>14%</td>
<td>19%</td>
<td>8%</td>
<td>18%</td>
<td>5%</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stellantis</td>
<td>10%</td>
<td>6%</td>
<td>7%</td>
<td>5%</td>
<td>3%</td>
<td>2%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ford</td>
<td>9%</td>
<td>11%</td>
<td>4%</td>
<td>10%</td>
<td>0%</td>
<td>4%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mazda-Subaru-Suzuki-Toyota</td>
<td>2%</td>
<td>3%</td>
<td>1%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3. New passenger car fleet average CO₂ emission level, by manufacturer pool.

<table>
<thead>
<tr>
<th>Target gap</th>
<th>New car fleet average CO₂ (in g/km)</th>
<th>Compliance credits</th>
<th>Status 2021</th>
<th>Target 2021</th>
<th>Target gap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nov 2021</td>
<td>YTD 2021</td>
<td>WLTP</td>
<td>NEDC</td>
<td>WLTP</td>
</tr>
<tr>
<td>Tesla-Honda-JLR</td>
<td>-51%</td>
<td>47 39</td>
<td>71 59</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Volvo</td>
<td>-20%</td>
<td>87 73</td>
<td>105 88</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>BMW</td>
<td>-5%</td>
<td>108 93</td>
<td>118 101</td>
<td>0.2</td>
<td>0.0</td>
</tr>
<tr>
<td>Daimler</td>
<td>-5%</td>
<td>103 92</td>
<td>117 104</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Ford</td>
<td>-4%</td>
<td>118 95</td>
<td>121 98</td>
<td>0.2</td>
<td>5.7</td>
</tr>
<tr>
<td>Kia</td>
<td>-3%</td>
<td>96 83</td>
<td>106 92</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>-2%</td>
<td>105 87</td>
<td>116 96</td>
<td>0.0</td>
<td>0.5</td>
</tr>
<tr>
<td>Hyundai</td>
<td>-1%</td>
<td>100 86</td>
<td>108 93</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Mazda-Subaru-Suzuki-Toyota</td>
<td>0%</td>
<td>117 93</td>
<td>119 95</td>
<td>0.0</td>
<td>2.6</td>
</tr>
<tr>
<td>Stellantis</td>
<td>0%</td>
<td>110 86</td>
<td>119 94</td>
<td>0.0</td>
<td>0.3</td>
</tr>
<tr>
<td>VW Group</td>
<td>1%</td>
<td>111 93</td>
<td>120 100</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Renault-Mitsubishi</td>
<td>1%</td>
<td>99 84</td>
<td>112 95</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Notes: EC = eco-innovations, SC = super-credits; all CO₂ values are estimates, see methodology section.

Year-to-date, the registration share of plug-in hybrid and battery electric vehicles was the highest in Norway (86%). Iceland (56%), Sweden (43%), Denmark (33%), Finland (30%), Germany (25%), the Netherlands (25%), Luxembourg (20%), and Austria (19%) also currently have electric vehicle registration shares above the European average of 18%.

![Figure 1: Share of electric vehicles, by country, including information on market size (cumulative car registrations).](image-url)
**Table 4.** New passenger car registrations, by country.

<table>
<thead>
<tr>
<th></th>
<th>New car registrations</th>
<th>YTD 2021</th>
<th>YTD 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>198,258</td>
<td>-32%</td>
<td>2,394,502</td>
</tr>
<tr>
<td>France</td>
<td>121,994</td>
<td>-3%</td>
<td>1,500,886</td>
</tr>
<tr>
<td>Italy</td>
<td>104,757</td>
<td>-24%</td>
<td>1,374,719</td>
</tr>
<tr>
<td>Spain</td>
<td>67,664</td>
<td>-15%</td>
<td>795,808</td>
</tr>
<tr>
<td>Poland</td>
<td>31,956</td>
<td>-23%</td>
<td>410,250</td>
</tr>
<tr>
<td>Netherlands</td>
<td>27,333</td>
<td>-18%</td>
<td>369,731</td>
</tr>
<tr>
<td>Sweden</td>
<td>21,180</td>
<td>-21%</td>
<td>275,650</td>
</tr>
<tr>
<td>Austria</td>
<td>17,796</td>
<td>-12%</td>
<td>226,606</td>
</tr>
<tr>
<td>Czechia</td>
<td>16,168</td>
<td>-8%</td>
<td>190,667</td>
</tr>
<tr>
<td>Other</td>
<td>87,380</td>
<td>-22%</td>
<td>1,427,946</td>
</tr>
<tr>
<td>ALL</td>
<td>718,894</td>
<td>-21%</td>
<td>9,074,042</td>
</tr>
</tbody>
</table>

For light commercial vehicles (vans), new registrations in November 2021 were about 16% lower than in November 2020. Year-to-date, approximately 12% more vehicles were newly registered than during the same time period in 2020. On average, 5% of new vans were battery electric vehicles. Year-to-date, Renault-Mitsubishi and Daimler currently are the manufacturer pools with the highest share of electric vans (6%), and Germany is the country with the highest share (4%). On average, van manufacturer pools are currently about 6 g/km, or 3% away from complying with their respective 2021 CO₂ targets.

**Table 5.** Share of plug-in hybrid and battery electric passenger cars, by country (EU only).

<table>
<thead>
<tr>
<th>Share of plug-in hybrid and battery electric cars</th>
<th>YTD 2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEV</td>
<td>PHEV</td>
<td>BEV</td>
</tr>
<tr>
<td>Netherlands</td>
<td>28%</td>
<td>11%</td>
</tr>
<tr>
<td>Sweden</td>
<td>26%</td>
<td>28%</td>
</tr>
<tr>
<td>Germany</td>
<td>23%</td>
<td>12%</td>
</tr>
<tr>
<td>Austria</td>
<td>20%</td>
<td>6%</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>France</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td>Belgium</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>Italy</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Spain</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Poland</td>
<td>3%</td>
<td>2%</td>
</tr>
<tr>
<td>Czechia</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>ALL</td>
<td>15%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Table 6.** New van registrations, by manufacturer pool.

<table>
<thead>
<tr>
<th>New van registrations</th>
<th>YTD 2021</th>
<th>YTD 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stellantis</td>
<td>41,066</td>
<td>-11%</td>
</tr>
<tr>
<td>Volkswagen-Ford-SAIC</td>
<td>24,752</td>
<td>-26%</td>
</tr>
<tr>
<td>Renault-Mitsubishi</td>
<td>23,284</td>
<td>-15%</td>
</tr>
<tr>
<td>Daimler</td>
<td>12,792</td>
<td>-30%</td>
</tr>
<tr>
<td>Other</td>
<td>13,831</td>
<td>15%</td>
</tr>
<tr>
<td>ALL</td>
<td>115,725</td>
<td>-16%</td>
</tr>
</tbody>
</table>

**Table 7.** Share of plug-in hybrid and battery electric vans, by manufacturer pool.

<table>
<thead>
<tr>
<th>Share of plug-in hybrid and battery electric vans</th>
<th>YTD 2021</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEV</td>
<td>PHEV</td>
<td>BEV</td>
</tr>
<tr>
<td>Renault-Mitsubishi</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Daimler</td>
<td>6%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>6%</td>
<td>1%</td>
</tr>
<tr>
<td>Stellantis</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>AVERAGE</td>
<td>5%</td>
<td>0%</td>
</tr>
<tr>
<td>Volkswagen-Ford-SAIC</td>
<td>2%</td>
<td>0%</td>
</tr>
</tbody>
</table>

**Table 8.** New vans fleet average CO₂ emission level, by manufacturer pool.

<table>
<thead>
<tr>
<th>New vans fleet average CO₂ (in g/km)</th>
<th>Nov 2021</th>
<th>YTD 2021</th>
<th>Credits</th>
<th>Status 2021</th>
<th>Target 2021</th>
<th>Target gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stellantis</td>
<td>1%</td>
<td>172</td>
<td>127</td>
<td>184</td>
<td>136</td>
<td>0.0</td>
</tr>
<tr>
<td>Volkswagen-Ford-SAIC</td>
<td>3%</td>
<td>196</td>
<td>162</td>
<td>199</td>
<td>164</td>
<td>0.0</td>
</tr>
<tr>
<td>Average</td>
<td>3%</td>
<td>190</td>
<td>148</td>
<td>194</td>
<td>152</td>
<td>0.0</td>
</tr>
<tr>
<td>Daimler</td>
<td>4%</td>
<td>230</td>
<td>190</td>
<td>224</td>
<td>185</td>
<td>0.0</td>
</tr>
<tr>
<td>Renault-Mitsubishi</td>
<td>7%</td>
<td>192</td>
<td>148</td>
<td>192</td>
<td>148</td>
<td>0.0</td>
</tr>
</tbody>
</table>
Table 9. New van registrations, by country (EU only).

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>31,647</td>
<td>-12%</td>
<td>392,136</td>
<td>10%</td>
</tr>
<tr>
<td>Germany</td>
<td>21,491</td>
<td>-25%</td>
<td>243,571</td>
<td>0%</td>
</tr>
<tr>
<td>Italy</td>
<td>14,617</td>
<td>-15%</td>
<td>155,986</td>
<td>17%</td>
</tr>
<tr>
<td>Spain</td>
<td>9,309</td>
<td>-21%</td>
<td>119,647</td>
<td>15%</td>
</tr>
<tr>
<td>Other</td>
<td>38,661</td>
<td>-12%</td>
<td>513,759</td>
<td>18%</td>
</tr>
<tr>
<td>ALL</td>
<td>115,725</td>
<td>-16%</td>
<td>1,425,099</td>
<td>12%</td>
</tr>
</tbody>
</table>

In November, plug-in hybrid and battery electric vehicles in Croatia accounted for about 12% of new passenger car registrations. During the second half of 2021, the electric vehicle market share increased continuously, starting from about 3% in July. Battery electric vehicle registrations are clearly outweighing plug-in hybrids.

Table 10. Share of plug-in hybrid and battery electric vans by country.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Italy</td>
<td>6%</td>
<td>1%</td>
<td>2%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Other</td>
<td>5%</td>
<td>0%</td>
<td>3%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Average</td>
<td>5%</td>
<td>0%</td>
<td>3%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Germany</td>
<td>4%</td>
<td>0%</td>
<td>4%</td>
<td>0%</td>
<td>3%</td>
<td>0%</td>
</tr>
<tr>
<td>France</td>
<td>4%</td>
<td>0%</td>
<td>3%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
</tr>
<tr>
<td>Spain</td>
<td>2%</td>
<td>0%</td>
<td>2%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Figure 2. Share of electric vehicles in Croatia (spotlight of the month).
DEFINITIONS, DATA SOURCES, METHODOLOGY, AND ASSUMPTIONS

Manufacturer pools: Automakers are allowed to form pools to jointly comply with CO₂ targets. For this factsheet, the definition of pools according to the European Commission, “M1 pooling list”, version of 20 December 2021 applies (main brands listed here): BMW (BMW, Mini), Daimler (Mercedes-Benz, Smart), Ford (Ford), Hyundai (Hyundai), Kia (Kia), Mazda-Subaru-Suzuki-Toyota (Lexus, Mazda, Subaru, Suzuki, Toyota), Renault-Mitsubishi (Dacia, Mitsubishi, Nissan, Renault), Stellantis (Alfa Romeo, Citroën, Fiat, Jeep, Lancia, Opel, Peugeot), Tesla-Honda-JLR (Honda, Jaguar Land Rover, Tesla), Volvo (Volvo) and VW Group (Audi, Porsche, SEAT, Škoda, VW). For light commercial vehicles, the “N1 pooling list”, version 20 December 2021, applies: Daimler (Mercedes-Benz), Renault-Mitsubishi (Dacia, Mitsubishi, Nissan, Renault), Stellantis (Alfa Romeo, Citroën, Fiat, Opel, Peugeot), Volkswagen-Ford-SAIC (BYD, Ford, MAN, SAIC, Polaris, Streetscooter, Volkswagen).

Abbreviations: CO₂ = carbon dioxide emissions; g/km = grams per kilometer; YTD = year to date.

Technical scope: This factsheet focuses on new passenger car and light commercial vehicle registrations.

Geographic scope: The European CO₂ regulation for vehicle manufacturers applies to all countries of the Economic Area (EEA). This includes the 27 member states of the European Union, plus Iceland, Liechtenstein, and Norway. Data for new car registrations and shares of electric vehicles in this factsheet cover all of these countries, with the exception of Bulgaria, Liechtenstein, and Malta. Data for CO₂ emission levels additionally omit Hungary, Lithuania, Poland (until April 2020), Portugal, and Romania (together less than 10% of the total market).

Data sources: AAA DATA (France), Dataforce (all other markets).

Results may change over time: Registrations and/or CO₂ data may be retrospectively updated by some of the national type approval authorities. Historical values are regularly updated to reflect all latest data available.

Test procedures: For the conversion of CO₂ values from the New European Drive Cycle (NEDC) to the Worldwide harmonized Light vehicles Test Procedure (WLTP), manufacturer-specific factors based on 2020 market data are applied.¹

Flexible compliance mechanisms: To facilitate meeting their CO₂ targets, manufacturers can make use of a number of compliance mechanisms: (1) Manufacturers can reduce their CO₂ level by up to 7 g/km by deploying eco-innovation technologies. As a conservative estimate, we apply the 2020 level of eco-innovation CO₂ emission reductions per manufacturer²; (2) New passenger cars with less than 50 g/km CO₂/km (NEDC) are counted 1.67 times in 2021 (super-credit). The impact of super-credits for complying with the CO₂ targets is capped at 7.5 g/km per manufacturer for the years 2020-2022 together.

Mass-based targets: For each manufacturer pool, a specific 2021 CO₂ target value applies, depending on the average mass of the new cars registered. For this factsheet, we assume the average mass per manufacturer pool to remain constant with respect to the market situation in 2020.³


Contact: Peter Mock, +49 30 233 268 410, peter@theicct.org