

# NEW VEHICLE EMISSION TESTS AND HOW THEY AFFECT YOUR CUSTOMERS AND THEIR EMPLOYEES EXPLAINED



For any vehicles sold since September 2018, both MPG and CO<sub>2</sub> ratings have had to be based on the new WLTP test.

The calculation of vehicle emissions feels a bit complex, given that the MPG and CO<sub>2</sub> ratings test is then recalculated back to New European Driving Cycle (NEDC) equivalent known as NEDC correlated or NEDCc. However, from April 2020, all new cars sold will be reported with just the true Worldwide Harmonised Light Vehicle Testing Procedure (WLTP) values.

In July the Government confirmed how company cars would be taxed from 6 April 2020. From this date the Benefit in Kind (BiK) will change which means the Vehicle Excise Duty (VED) and the Corporation tax on the vehicle may potentially be impacted.



From April 2020, all new cars sold will be reported with the true WLTP figures.

## Here is a summary of the changes:

		2020/21	2021/22	2022/23
<b>Cars registered up to 5 April 2020</b>	CO <sub>2</sub> emissions based on NEDCc values (as they are today).	rates held as previously published	Frozen	Frozen
<b>Cars registered from 6 April 2020</b>	CO <sub>2</sub> emissions based on WLTP values and new BiK tables published.	less 2% to recognise higher CO <sub>2</sub>	increase by 1%	increase by 1% (discount removed)
<b>Zero emission vehicles</b>		0%	1%	2%



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# What's the impact?

At this early stage, not all manufacturers have published the WLTP values for their vehicles. We are analysing the data as more becomes available; we currently only have true WLTP values for a limited number of vehicle models.

However, here are some specific vehicle examples to help illustrate the impact:

## Example 1

### Battery Electric Vehicle – Zero Emission



**Model:** HYUNDAI IONIQ HATCHBACK (2016)  
88kW Electric Premium SE 28kWh 5dr Auto  
**PIId:** £32,495

	2019/20	2020/21 Original	2020/21 Revised	2021/22	2022/23
BiK percentage	16%	2%	0%	1%	2%
BiK	£5,199	£650	£0	£325	£650
Monthly Tax Cost 20%	£86.65	£10.83	£0	£5.42	£10.83
Monthly Tax Cost 40%	£173.30	£21.66	£0	£10.84	£21.66

## Example 2

### Diesel Vehicle – (RDE2 Compliant)



**Model:** Mercedes A Class  
A200d Sport Executive Auto  
**PIId:** £30,675  
**NEDC CO<sub>2</sub>:** 110g/km  
**WLTP CO<sub>2</sub>:** 125g/km

Registered before 6 April 2020	2019/20	2020/21	2021/22	2022/23
BiK percentage	26%	27%	27%	27%
BiK	£7,976	£8,282	£8,282	£8,282
Monthly Tax Cost 20%	£132.93	£138.04	£138.04	£138.04
Monthly Tax Cost 40%	£265.86	£276.08	£276.08	£276.08

Registered from 6 April 2020	2019/20	2020/21	2021/22	2022/23
BiK percentage	N/A	28%	29%	30%
BiK	N/A	£8,589	£8,896	£9,203
Monthly Tax Cost 20%	N/A	£143.15	£148.26	£153.38
Monthly Tax Cost 40%	N/A	£286.30	£296.52	£306.76
<b>Variance @ 20% tax rate</b>	N/A	<b>+\$5.11</b>	<b>+\$10.22</b>	<b>+\$15.34</b>
<b>Variance @ 40% tax rate</b>	N/A	<b>+\$10.22</b>	<b>+\$20.44</b>	<b>+\$30.68</b>

Using the data currently available we have analysed the average monthly driver impact with the change from NEDC to WLTP.



On average employees will pay **£635** (£1270 for higher rate) more in tax over the typical 4 year term if their car is registered from 6 April 2020.

20% tax payer:

NEDC CO <sub>2</sub>	Petrol	Diesel	Overall Average
100-109	£5.93	£11.78	£10.30
110-119	£9.70	£18.76	£13.87
120-129	£11.41	£16.78	£13.02
130-139	£16.41	£8.60	£14.63
<b>Overall Average</b>	<b>£11.88</b>	<b>£15.39</b>	<b>£13.22</b>

40% tax payer:

NEDC CO <sub>2</sub>	Petrol	Diesel	Overall Average
100-109	£11.86	£23.56	£20.60
110-119	£19.40	£37.52	£27.74
120-129	£22.82	£33.56	£26.04
130-139	£32.82	£17.20	£29.26
<b>Overall Average</b>	<b>£23.76</b>	<b>£30.78</b>	<b>£26.44</b>

## Vehicle extras and WLTP

With the change to WLTP all extras added to a vehicle will potentially impact the MPG and CO<sub>2</sub> values of that vehicle, which in turn may then impact the BiK value.

When you choose a vehicle, our quote will have the WLTP data for the standard specification vehicle; when any extras are added or for example wheels changed to a different size, we will then request an update from the manufacturers for updated MPG and CO<sub>2</sub> values. If for any reason this isn't available, you may start to see indicative MPG and CO<sub>2</sub> values which will need verification prior to order.

## Employers Class 1A

As an employer you will pay Class 1A NICs on the BiK at 13.8%. Therefore the changes to the BiK will impact you. The following table shows the monthly movement in NIC cost for cars registered prior to 6 April 2020 compared to cars registered from 6 April 2020:

NEDCc CO <sub>2</sub>	Unleaded	Diesel	Overall Average
100-109	£4.09	£8.13	£7.11
110-119	£6.69	£12.95	£9.57
120-129	£7.87	£11.58	£8.98
130-139	£11.32	£5.94	£10.10
<b>Overall Average</b>	<b>£8.20</b>	<b>£10.62</b>	<b>£9.12</b>



On average employers will pay

**£438**

more NI over 4 years for a car registered from 6 April 2020.

## Change to Vehicle Excise Duty (VED) based on WLTP

Unlike the BiK changes which come into effect on the 6 April 2020, the WLTP based VED will change from the 1 April 2020. The table has not changed, however the category for the first year rate that the vehicle will fall into could change if the CO<sub>2</sub> rating under WLTP testing is higher than the NEDCc rating.

CO <sub>2</sub> emissions (g/km)	First Year Rate	First Year Rate Non-RDE2 Diesel
0	£0	£0
1-50	£10	£25
51 - 75	£25	£110
76 - 90	£110	£130
91 - 100	£130	£150
<b>101 - 110</b>	<b>£150</b>	<b>£170</b>
111 - 130	£170	£210
131 - 150	£210	£530
151 - 170	£530	£855
171 - 190	£855	£1,280
191 - 225	£1,280	£1,815
226 - 255	£1,815	£2,135
Over 255	£2,135	£2,135

Potential increased CO<sub>2</sub> values as a result of WLTP could lead to additional costs which may be significant, for example:

**If 110g/km becomes 125g/km:** the difference is an increase of £20.

**If 160g/km becomes 175g/km:** the difference is £325 (approximately £6.77 a month on a 4 year lease).



On average, across the vehicles we have data for, VED will increase rentals by approximately £2.62 per month.

## Impact on Corporation Tax

The rules around Corporation Tax are not changing. However the same as VED, an increase in the CO<sub>2</sub> emissions resulting from the move to WLTP ratings, may lead to additional cost.

### Key points are:

- Cars with CO<sub>2</sub> greater than 110g/km are impacted by Corporation Tax restrictions
- Cars up to 110g/km receive tax relief on 100% of the lease costs
- Cars above 110g/km only receive tax relief on 85% of the lease costs

If a car has an NEDCc rating below 110g/km, but a WLTP rating above 110g/km, the tax relief will be reduced from 100% to 85% for cars registered from 6 April 2020.

	Pre April 6	From April 6
Taxation Basis	NEDCc	WLTP
CO <sub>2</sub>	110g/km	125g/km
Monthly Rental	£400	£400
Tax Relief %	100%	85%
Tax Relief @17% (2020/21)	£68.00	£57.80
Post-Tax Rental Cost	£332.00	£342.20
<b>Additional Cost</b>		<b>£10.20</b>

Of the sample models available to analyse, 7.5% of vehicles will suffer impaired tax relief if registered from 6 April 2020.

## What action is Arval taking?

In the next few months our quotes will start to display both NEDC and WLTP values. However, on all rentals, BIK and VED will continue to be based on NEDC values until early 2020 when they will start to be based on WLTP values. During the first few months of 2020, and once you have confirmed a delivery date for a vehicle, you may need to requote your customer to change from NEDC to WLTP or vice versa. More information about this process will follow, but please ensure your customers are aware of possible changes to rentals and BIK.

## What action should customers consider taking?

Invariably costs for some cars may increase and some may decrease. There are definitely some winners in the form of electric vehicles and some where the BIK will have a noticeable increase. At the moment the manufacturer data is limited so these conclusions have been drawn from the data available. We would recommend:

- ✓ Order cars promptly so they are registered prior to 6 April for petrol and diesel vehicles, then the tax is frozen for the next 3 years.
- ✓ Consider making electric and PHEV vehicles available to staff but ensure they order what is practical for them.
- ✓ Lead times on electric vehicles can be long – consider early ordering to minimise impact on renewal cycles – although these are not impacted by the WLTP change.
- ✓ Lead times may extend out at the start of 2020 as people rush to secure orders at NEDC values – order early and promptly where possible to avoid this.
- ✓ Consider whether orders for customers due shortly after the change could be brought forward if relevant.



**It is important that customers are made aware at the point of order which pricing regime (pre or post April) their rentals and BIK is based on and that if delivery changes, it is possible these costs could change.**

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Arval UK Limited (Whitehill House, Windmill Hill, Swindon, SN5 6PE. Registration number 1073098. VAT Registration GB 202 1441 76).  
Email: [info@arval.co.uk](mailto:info@arval.co.uk) | Telephone: 01793 887000



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