

**Corrigendum: Net Zero by 2050 - A Roadmap for the Global Energy Sector**

**Issued:** 28 May 2021/17 June 2021/20 July 2021/21 October 2021

**Link to report:** <https://www.iea.org/reports/net-zero-by-2050>

On **page 21**, the first paragraph was modified as follows:

Beyond projects already committed as of 2021, there are no new oil and gas fields approved for development in our pathway, and no new coal mines or mine extensions are required. The unwavering policy focus on climate change in the net zero pathway results in a sharp decline in fossil fuel demand, meaning that the focus for oil and gas producers switches entirely to output – and emissions reductions – from the operation of existing assets. Unabated coal demand declines **by 98% to just less than 1%** of total energy use in 2050. Gas demand declines by 55% to 1 750 billion cubic metres and oil declines by 75% to 24 million barrels per day (mb/d), from around 90 mb/d in 2020.

On **page 65**, Figure 2.13, in the note: removed "CCUS = carbon capture utilisation and storage" as not relevant for this figure.

On **page 76**, Table 2.7: Values for Ammonia and Synfuels in transport were swapped. Correct values are:

Transport	0	25	207
of which hydrogen	0	11	106
of which ammonia	0	8	44
of which synthetic fuels	0	5	56
Industry	51	93	187

Note: Hydrogen-based fuels are reported in million tonnes of hydrogen required to produce them.

On **page 155**, Figure 4.2 has been updated, along with the relevant note:

Infrastructure includes electricity networks, public EV charging, CO<sub>2</sub> pipelines and storage facilities, direct air capture and storage facilities, hydrogen refuelling stations, and import and export terminals for hydrogen and fossil fuels pipelines and terminals. End-use efficiency investments are the incremental cost of improving the energy performance of equipment relative to a conventional design.

On **page 197**, Table A.2: updated numbers for 2030, 2040 and 2050. as a consequence the shares and growrates were also updated.

**Table A.2: Energy demand**

	Energy demand (EJ)					Shares (%)			CAAGR (%)	
	2019	2020	2030	2040	2050	2020	2030	2050	2020-2030	2020-2050
Transport	122	105	102	85	80	100	100	100	-0.3	-0.9
Electricity	1	1	7	22	35	1	7	44	17	11
Liquid fuels	115	99	89	53	30	94	87	38	-1.0	-3.9
Biofuels	4	3	11	12	11	3	11	14	14	4.3
Oil	111	96	76	35	9	91	74	12	-2.2	-7.4

On **page 199**, Table A.4: Highlighted item changed from -55.4 to n.a.

**Table A.4: CO<sub>2</sub> emissions**

	CO <sub>2</sub> emissions (Mt CO <sub>2</sub> )					CAAGR (%)	
	2019	2020	2030	2040	2050	2020-2030	2020-2050
<b>Total CO<sub>2</sub>*</b>	35 926	33 903	21 147	6 316	0	-4.6	n.a.
<b>Combustion activities (+)</b>	33 499	31 582	19 254	6 030	940	-4.8	-11
Coal	14 660	14 110	5 915	1 299	195	-8.3	-13
Oil	11 505	10 264	7 426	3 329	928	-3.2	-7.7
Natural gas	7 259	7 138	5 960	1 929	566	-1.8	-8.1
Bioenergy and waste	75	71	- 48	- 528	- 748	n.a.	n.a.
<b>Industry removals (-)</b>	1	1	214	914	1 186	75	28

On **page 200**, Table A.5: change of unit from billion pkm to billion vkm.

<b>Transport</b>							
Passenger cars (billion vkm)	15 300	14 261	15 775	19 159	24 517	1.0	1.8
Trucks (billion tkm)	26 646	25 761	38 072	49 756	59 990	4.0	2.9
Aviation (billion pkm)	8 506	5 474	10 271	11 573	14 566	6.5	3.3
Shipping (billion tkm)	107 225	109 153	155 621	209 905	291 032	3.6	3.3

On **page 208**, changed the "Industry" definition to reflect the change in methodology.

On **page 210**, changed the "Other energy sector" definition to reflect the change in methodology.

On **pages 207 and 216**, correction from "nitrous dioxide (N<sub>2</sub>O) " to "nitrous oxide".