It is never easy to reconcile Tesla's market capitalization with any real-world figure, but here I will attempt one: Tesla's market share in Norway. Norway may only rank 119th in terms of population in the world, but it is clearly #1 in terms of promulgation of electric cars. According to Norwegian auto industry group OFV, 53% of cars sold in Norway in January were pure electrics, with hybrids representing 35% of new vehicle sales. So, "fossil fueled-only cars" only represented 12% of Norway's vehicle sales in January, and no one could argue the "green" credentials of the Nordic nation.

So, watching Tesla's market share in Norway is highly indicative of future market positioning. In a world where only 12% of the cars run exclusively on fuel, how will Tesla do versus the competition? Short answer: not well.

Volkswagen's e-offensive in Europe has been impressive, and successful. The top selling electric vehicle in Norway thus far in 2021 is Audi's e-tron, and that vehicle was the best-selling car--of any propulsion type, not just electric--in Norway in 2020. The league table in 2020 showed Vokswagen's ID.3 in a virtual tie for second place after the e-tron with Tesla's Model 3. This despite the fact that the ID.3 was only introduced in September.

So, Elon has competition. Tesla is infamous for stuffing their delivery channels at the end of any quarter, and especially the fourth quarter, as beating Street estimates is paramount for this company and its Musk-led management team. But after registering 4,149 cars in December, Tesla has in the first forty days of 2021 (vehicle registration data is available on a daily basis in Norway) registered a grand total of 117 cars (68 3, 26 S, 23 X) in 2021.

The league table in Norway is indicative of the real presence of competition in the European BEV market. Yes there are still a few "legacy" models rejiggered with electric powertrain --VW's UP! And e-Golf, for instance. But a look at the top 10 BEV sellers in Norway, shows a predominance of designed-to-be-electric models with a true BEV identity. After Peugeot's e-2008, which has gotten off to a hot start in Continental markets since its introduction last year, the third and fourth spots are taken by the Polestar 2 and Volvo XC40 Recharge. Both models are produced by Geely/Volvo, with the Polestar 2 made in China and the Volvo XC40 Recharge produced in Belgium, The Nissan Leaf, which sits at #5, is the all-time best selling BEV in Norway, and certainly a trailblazing model.

The market for BEVs in Europe is becoming increasingly fragmented. The days when consumers had to choose between a Tesla or what we auto analysts derisively refer to as "compliance cars," are over. The "legacy" automakers are coming to market with MUCH more appealing products in the BEV space, and that is a dagger aimed at Elon's heart.

So, the Model 3 is the 25th-best selling electric car in Norway thus far in 2021 and Tesla's total brand share in the BEV category sits at about 1.5% in Norway in 2021. In 2020, Tesla registered 8,749 cars in Norway, for an 11.4% BEV market share, down substantially from the 18,801 cars Teslas registered in Norway in 2019, which had represented a 31.1% BEV market share. The trend is clear, and while Tesla's share will inevitably improve somewhat as March (end of quarter) arrives, the Norwegian BEV market is

so incredibly fragmented now that incremental sales are much harder to come by. That is true in other European nations, as well.

Astoundingly, Tesla managed to register a total of 16 cars in The Netherlands in January after registering 4,149 cars in The Netherlands in December. The Netherlands is Tesla's current "home" country in the EU, as its main distribution facility is in Tilburg, where some final assembly is done on cars shipped from the USA.

Availability is always a question as Tesla exports all its European product, mostly from its main factory in Fremont, California, but also, famously, as part of a 7,000-unit shipment from China in Q4. But we are nearing the halfway point of the first quarter, and my industry sources are telling me that not all of those 7,000 China-made Model 3s have been sold. There is no Tesla shortage in Europe.

Also, those Made-in-China Model 3s are "bottom of the line" SR+ models. Published reports have indicated that the LFP battery chemistry of units made by Tesla China with batteries supplied by CATL--Tesla switched to locally-made batteries for its Made-in-China Model 3s in 2020 after initially using cells produced at its "gigafactory" joint venture plant in Nevada that it shares with Panasonic--performs very poorly in cold weather, which would certainly be an issue for Norwegian buyers.

So, this is where Tesla's very business model comes into question. Jamming a bunch of cars into consumer hands--with frequent price cuts--at the end of every quarter has never been a value-creating proposition for Tesla. More than 100% of Tesla's 2020 "net profit" was derived from sales of ZEV credits to other automakers. Tesla lost money making cars...and solar panels and energy storage batteries, and has in every quarter since it became a public company.

So, now the stakes are raised dramatically for Tesla in Europe, thanks to Musk's decision to build a factory in Gruenheide, Germany, outside Brandenberg and close to Berlin. As with everything Tesla, that facility's construction has been covered with a microscope by the local media. Some construction delays--caused by local Green groups' objection to the plant's invasion on the natural habitat of sand lizards (among other species)--were certainly foreseeable.

But Tesla will build that plant, and it will produce cars in 2021, with full-scale production likely to begin in the second half of 2021. But will anyone want to buy them? Tesla has made or almost made every quarterly number--including 4Q20's delivery figure of 180,000, which allowed to Tesla post the "close enough" full-year 2020 delivery figure of 499,500 versus Musk's stated goal of half a million units--by stuffing cars into Europe at the end of those quarters.

Mathematics would tell you, though, that there has to be some base from which to grow, and the numbers don't lie. Owing to my history as a European autos analyst and my inherent geekiness, I keep track of European auto sales figures--registrations are generally reported as opposed to unit sales; the numbers are very similar. See the table below for Tesla's shockingly low "non-start" to 2021. The table also presents the figures for December 2020, and, of course, Tesla registrations showed a huge sequential drop-off. Anyone would have predicted a sequential decline given Tesla's selling practices, but the fact that January 2021's sales figures are so far below January 2020's--despite those Chinese made SR+ Model 3s still floating around--shows what is abundantly clear: Tesla has a demand problem. More specifically Tesla has a competition problem. Elon does not have the only game in town anymore.

In an auto world that is shifting to electrified powertrains via government mandates and consumer taste-shifting, Tesla has awakened the sleeping giants of the global auto industry. Volkswagen is absolutely

outclassing Tesla in Europe with the ID.3. The ID.3's close cousin, the ID.4 SUV BEV, wlll, according to my sources, begin to be delivered to Chinese buyers after the Lunar New Year holiday ends in two weeks. The ID.4 will be introduced in the U.S--initially imported from VW's facility in Zwickau, Germany--in March of this year, with local production beginning at VW's Chattanooga, Tennessee plant in 2022.

As always the numbers should be your guide when attempting to find a fair value for Tesla. Musk missed his 500.000 unit target--albeit barely--in 2020, and his very vague forecast of 50% growth in 2021 has been narrowed by analysts to a 750,000-800,000 unit benchmark. Tesla has no chance of selling that many cars in 2021. Zero. That incorrect narrative presents an investable situation.

I will analyze Tesla's sales in the U.S, and in China in future OHM Research pieces, but, for now, here are the figures from Europe, certainly the Earth's "greenest" continent. Monthly figures are not available for the UK, as Tesla has never joined the SMMT auto industry association.

Gas-powered cars are going the way of the dodo bird in Europe; I certainly do not argue that. But which companies will actually gain from that shift is still in question, especially in a stock market that affords Tesla a market cap that nearly equals all the world's other publicly traded automakers' market caps combined.

Tesla registrations; Europe						
	1/20	***12/20***	***1/21***	y/y	sequential	FY2020
Germany	367	3,545	453	23.43%	-87.22%	16,694
Netherlands	165	4,149	16	-90.30%	-99.61%	8,966
Norway	194	4,424	108	-44.33%	-97.56%	8,749
France	170	1,034	86	-49.41%	-91.68%	7,372
Switzerland	203	1,810	63	-68.97%	-96.52%	6,044
Sweden	165	1,037	33	-80.00%	-96.82%	4,921
Denmark	73	1,644	19	-73.97%	-98.84%	4,723
Italy	97	923	56	-42.27%	-93.93%	3,798
Austria	70	751	112	60.00%	-85.09%	3,235
Belgium	54	341	100	85.19%	-70.67%	2,971
Spain	32	326	47	46.88%	-85.58%	1,465
Portugal	33	271	15	-54.55%	-94.46%	1,413
	1,623	***20,255***	***1,108***	**-31.73%**	**-94.53%**	***70,351***

Norway EV Registrations			
	2/8/20	February 2020	2020 YTD
Audi E-tron	37	167	931
PEUGEOT 2008	21	140	626
POLESTAR Polestar 2	28	121	563
VOLVO XC40	12	65	526
Nissan Leaf	13	108	519
Mercedes-benz Eqc 400 4matic	8	38	509
KIA NIRO	10	75	388
Mg Mg Zs Ev	15	65	338
HYUNDAI Kona	13	81	335
Bmw I3	19	83	257
TOYOTA PROACE	3	37	256
MAZDA MAZDA MX-30	2	29	211
PEUGEOT 208	10	46	208
Kia Soul	4	31	164
Hyundai Ioniq	7	31	158
Volkswagen Up!	4	21	156
OPEL CORSA	2	12	153
VOLKSWAGEN ID.3 PRO 150 KW	7	37	148
Jaguar I-pace	5	36	147
LEXUS LEXUS UX300E	2	30	129
Renault Zoe	6	17	98
MAXUS MAXUS e-DELIVER 3	4	11	95
NISSAN NISSAN e-NV200	4	17	90
MAXUS MAXUS EUNIQ 5	0	2	72
Tesla Model 3	0	5	68

Fiat 500 Electric	3	7	63
Volkswagen Golf	3	12	54
Skoda Citigo	2	5	52
Porsche Taycan	2	6	50
CITROEN CITROEN e-C4	0	1	48
OPEL VIVARO	0	8	41
CITROEN JUMPY	0	4	27
Tesla Motors Model S	0	1	26
Maxus Ev80	2	9	25
MERCEDES-BENZ EQV	0	5	25
BYD ETP3	0	4	24
Tesla Motors Model X	0	3	23

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