

## State of charge requirements for Battery Electric Vehicles in the supply chain

For OEMs

	0-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-100%	Update in 2023	
BMW												The cars send a "charge me" message in the combi-instrument when 2,5Ah is reached. Charging for 0,5 hour. The vehicles are at max. 15% when arriving at the dealers
Ford												If the HV battery SoC goes below 20% the LSPs will have to charge these back to 50% before delivery to the dealer. Intent is for vehicle to arrive at dealer w/ 20% SoC.
Glovis												Max SoC level: 45-50% on hybrid battery at the end of the line Minimum SoC Level: 15% of SOC level is optimal; <15% is critical; <5% is not possible to start the engine.
Honda												we have Honda e from JPN factory to UK & EU with 10-15% and we will charge up to 20% for cars to go to dealers. New full EV will come soon - info will be updated then
JLR												If the vehicles are below 11% SoC they are charged back to 19% Maximum charge target/ assumption is 40%
Mazda												Vessel transport: over 39% Arrival at port: over 33% Depart from port: over 4% Arrival at dealer: over 1% Charge to 10% if SOC is too low at port or in inland transport
Mercedes												Vehicles leave the production/plant with 26.5% SoC. At display of the message (ca. 19% SoC) charge to 30-55%, although the max. charge level in the supply chain will be 30%
Mitsubishi												Minimum level is 10%, if 11% is reached, charge up to 30%-40%.
Stellantis												All vehicles must enter the logistics flow with 35% SoC. If the SoC is at 15% charge the vehicle to 35%. There are no differences between the different brands
Renault												The Renault vehicles come out of the factories with a 20-50% range of battery charge, depending on the battery size and the intrinsic energy consumption of the vehicle. In the supply chain when the battery charge is lower than the minimum SOC established for that particular model, the battery has to be charged to the min. SoC of the model (this is between 30-50%)
Tesla											From the factory to Service Center, we are trying to be at 80% SoC From the factory to Port we are charging at 60% SoC	
Volvo												Volvo is considering adopting the 20-50% range recommended by EMSA, but in future models the SoC might be less, at around 10%. When a BEV car today leaves the Volvo plant the average SoC is around 27%. If a HV battery needs to be charged in the distribution chain we charge it to minimum of 25% and a maximum of 40% SoC.
Volkswagen												The vehicle leaves the factory at around 30%, if the SoC gets under 10% in the supply chain, the battery has to be charged to 20%

## State of charge requirements

For shipping lines

	0-10%	10-20%	20-30%	30-40%	40-50%	50-60%	60-70%	70-80%	80-90%	90-100%	Comments
EUKOR				✦							New or used vehicles or H&H have to be between 20% and 50%, with a recommended SoC being at 35%. There is no physical check of the SoC - we rely on the OEMs to follow our requirements
Euro-Marine Logistics											If unit is out of this range, it will not be accepted onboard.
Finnlines											We follow EMSA guidance on the carriage of AFVs in RO-RO spaces and IMDG guidelines
Grimaldi Group											If unit's SoC is over 50%, we simply do not accept it onboard unless the customer is able to bring SoC within the allowed limits.
Höegh Autoliners											If the vehicle is not within our acceptance limits the SOC must either be lowered or the vehicle will have to be left behind
MCCL											Maximum SoC for <i>deep sea</i> : in the range of 40-50% Maximum SoC for <i>short sea</i> : in the range of 30-35% The minimum level depends on the clients' quality standards
MOL											If unit is out of this range, it will not be accepted on board
Neptune Lines											For all the EVs we recommend to have the SoC within the 20%-50% range. However, at the moment there are no defined mechanisms in port operations to control and ensure that the charging levels of the vehicles lie within said limits prior loading on the vessels.
NYK											Acceptable range is 25%-50%. If the SoC exceeds 50%, customer should inform NYK in advance with reason to get acceptance.
Suardiaz											
Toyofuji											
UECC											
Wallenius Wilhelmsen				✦							New or used vehicles or H&H have to be between 20% and 50%, with a recommended SoC being at 35%. There is no physical check of the SoC - we rely on the OEMs to follow our requirements