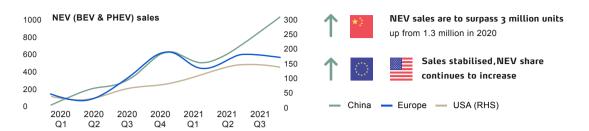
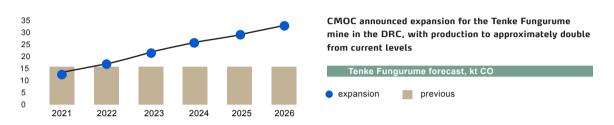
QUARTERLY COBALT MARKET UPDATE 2021 Q3



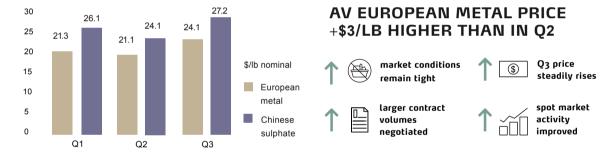
STRONG EV MARKET DRIVING >60% OF COBALT DEMAND IN 2021



\$2.5 BN MINE EXPANSION IN THE DRC



PRICES TREND UPWARDS, SPOT MARKET ACTIVITY IMPROVES



EV SNAPSHOT | COBALT CHEMICAL USE IN ELECTRIC VEHICLES

The share of high Ni NMC cathodes is rising. NMC721 is popular amongst the European OEMs with high energy density whilst managing battery stability. NMC811 and NCMA are also becoming more common, particularly for high end vehicles with longer ranges. The chemistries highlighted are those of particular relevance to the cobalt outlook.

| CHINA | | EUROPE | | USA | |
|---------------------|-------------|-----------------------|----------------|----------------|------------|
| Top 10 models | Chemistry | Top 10 models | Chemistry | Top 10 models | Chemistry |
| Hongguang mini EV | LFP & NMC | Tesla Model 3 | NCA & LFP | Tesla Model Y | NCA & NCMA |
| Tesla China Model 3 | LFP & NCA | Renault Zoe | NMC 721 | Tesla Model 3 | NCA & LFP |
| Tesla China Model Y | LFP & NCMA | VW ID.3 | NMC 721 | Chevy Bolt | NMC 721 |
| Ora R1 | LFP & NMC | VW ID.4 | NMC 721 | Mustang Mach-E | NMC 811 |
| BYD Han ** | LFP for BEV | Ford Kuga ** | NMC 532 | Nissan Leaf | NMC 532 |
| GAC Aion S | NMC | Skoda Enyaq iV | NMC 721 | VW ID.4 | NMC 721 |
| Cherry eQ | NMC | Fiat 500 Electric | NMC 622 | Audi E-tron | NMC 622 |
| CCAG Benben EV | LFP | Hyundai Kona Electric | NMC 622 / NCMA | Porsche Taycan | NMC 622 |
| XPeng Motors | LFP | Kia eNiro | NMC 622 | Tesla Model S | NCA |
| NIO ES6 | NMC 811 | Peugeot e208 ** | NMC 532 | Tesla Model X | NCA |

DATA: CRU's Cobalt Market Outlook, CAAM, ACEA, Argonne National Laboratory. Note: * EU metal Co 99.8% min (EXW); Chinese sulphate 20.5%, China 100%-Co basis ** PHEV model available. Remainder BEV only.

