BATTERY ELECTRIC VEHICLES

BEVs attract increased worldwide sales due to government subsidies, increased range and environmental considerations

Norway leads the way with 21% of new car sales being battery electric in 2017

China is the leading market accounting for 40% of electric vehicles sold in the world in 2016

Most international vehicle manufacturers have allocated considerable resources to research, design and manufacture of BEVs

On-road trialling of autonomous capability (vehicle drives itself) is being undertaken by various companies, many not traditional car manufacturers

Commercial vehicles such as semi-trailers (Tesla), delivery vans (Renault) and buses (BYD) are also being produced

Most markets are receiving financial support from their Government which lowers the price of the vehicles

Some countries have announced they will permit the sale of only zero emission vehicles after a specific date (mid 2020 to mid 2030)

Australian Greens have proposed a ban after 2030

Research and development of combustion engines is likely to slow due to growth of BEVs

Latest affordable BEVs have a range from 250 to 400kms

Higher initial cost but lower running costs compared to combustion vehicles

BEVs are specifically designed for electric operation (eg heat pumps, regenerative braking)

Battery packs with higher density charge and lower weight being developed

Increased charging capacity of batteries and charging equipment is reducing charge times

Modern EV batteries are capable of nearly 100% recycling either to be installed as home energy storage units or broken down to be re-used in new batteries

Australian Electric Vehicle Association - Tasmanian branch
www.aeva.asn.au