

Solar big in future of power

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A SHIFT to rooftop solar, battery storage and electric vehicles could save households up to \$5000 a year.

But a leading expert warns that Australia is unprepared for an electric vehicle revolution which will use up 20 per cent of the nation's power.

Infrastructure Australia executive director of policy and research Peter Colacino will tell the Queensland Infrastructure Summit tomorrow: "Australia is at a tipping point where it is no longer a question of if, but when major disruptions will impact the electricity and transport sectors."

The two sectors were undergoing the biggest changes in 100 years and converging in an unprecedented manner, with the consumer right at the heart of it, he told *The Courier-Mail*.

The take-up of EVs is expected to accelerate from 2025, when they will cost about the same as traditional combustion engine cars.

"Each of these electric vehicles will draw the same amount of energy as a house," Mr Colacino said. "The difference is we build about 5000

houses a month, but sell 100,000 cars."

Half the country's vehicle fleet is expected to be electric between 2035 and 2045 and close to 100 per cent by the middle of the century, requiring 20 per cent of the national electricity supply to power them.

Without good planning, the shift to an EV fleet would put pressure on the grid, requiring expensive additional infrastructure with significant costs to consumers and taxpayers.

However, a co-ordinated approach to renewable generation, smart meters and two-way energy flow electric vehicles could provide more than enough extra energy that will be required.

The CSIRO estimates rooftop solar could generate up to 45 per cent of total consumer energy requirements by 2045.

With the right reforms, Mr Colacino said, EVs could become part of the solution, acting as batteries for excess off-peak electricity while parked at night.

The Infrastructure Association of Queensland summit is being held at the Brisbane Convention and Exhibition Centre tomorrow.