Formula One cars to use hybrid-style electric-only mode in the pits

F1 cars will use electric power alone when driving through the pits from 2013, according to Williams team boss Adam Parr. Much like your dad's Prius.

Rory Reid  April 29, 2011 1:00 a.m. PT

Formula One is responsible for passing a shedload of hand-me-down tech to everyday road cars. Traction control, launch control, flappy paddle gearboxes and carbon fibre were all made famous through track racing before gaining mainstream acceptance in road cars, but it appears it's the road car's turn to influence F1.
The sport's governing body, the FIA, will introduce a next-generation hybrid system to F1 cars from the 2013 season onwards. And according to Williams team boss Adam Parr, this will allow them to run on electric power alone when driving through the pits -- much like hybrid road cars allow you to cruise on 'leccy power alone at low speeds.

Today's F1 cars already use part petrol, part electric hybrid-style KERS (kinetic energy recovery systems). At present, KERS is designed to provide an extra 80hp of boost for a maximum of 6.67 seconds per lap to aid overtaking. According to the excellent James Allen on F1 blog, however, Parr believes KERS systems of tomorrow will be four times more powerful than today's systems and have an EV-only mode.

"It will have one fan generating electricity to super-charge the engine, another fan to recover energy from the exhausts which will recharge a battery and then be usable," he said. "It's going to run on pure electric in the pitlane."

Some important figures in F1 are reluctant for the sport to take this path. F1 mogul Bernie Eccleston and Ferrari chief Luca di Montezemolo have both expressed their concerns, and have argued that part-electric cars won't produce the incredibly loud engine noise F1 cars are famous for.

The pair have also baulked at the FIA's plans to switch from the poweful eight-cylinder engines used in today's cars to smaller 1.6-litre four-cylinder turbocharged engines that will use less fuel and emit less carbon dioxide.

Parr believes there's no going back. "You've got cutting edge technology," he said. "I mean really the future of road cars, you're going to have a very powerful message about environmental performance and what technology can do. And the racing will be just as exciting, if not more."
"You are going to have a powertrain generating well over 800hp from four cylinders. It's going to sound fantastic."

We hope he's right.