

2010 Aptera 2e -- Quick Spin



The world's first wave of electric cars fell miles short of success, and there are plenty of theories as to why. Some say the technology wasn't ready, or the driving range too short. Others blame timing, given the 20-year streak of buck-a-gallon gas. Nearly everyone had trouble warming up to those Mercedes-style prices, and the off-center appearance of some models (we're looking at you, GM EV1) turned reactions colder still.

But that was then. Here in the now, the world has moved onto wildly unstable fuel prices, a new sense of environmental awareness, and radically different notions of automotive fashion. You might say the stage is finally set for electric car acceptance, provided someone can get the formula right.

That someone might just be Aptera, a young California startup that's spent the past five years developing the tri-wheeled transpod you see here. Dubbed the 2e (for "2-seat, electric"), Aptera's creation represents an original approach to electric motoring that promises a surprisingly normal, accessible piece of transportation.

Uh, not that you'd know by looking at it. The 2e might be the same length and height as a common Civic, but in the name of science and purity, its body was modeled after a teardrop (or possibly a tilapia). Being the most aerodynamic shape there is, it endows the 2e with a supremely slippery drag coefficient of 0.15 -- a record-breaking number that's only half as high as most cars. In addition to the aero benefits, the three-wheel layout also takes loads of mass off the ass, resulting in a feather-light curb weight of 1,700 pounds -- a cool thou less than a Civic and another remarkable record low among all cars of today. (Actually, the 2e isn't even technically a car, but a motorcycle - think free rides in the carpool lane.) Minimalism, efficiency, and function are the watchwords here.

It's hard to argue with the effect. Even with an estimated 70 horsepower, the front-wheel-drive 2e dashes to 60 MPH in under ten seconds (putting it neck-and-neck with the new Prius); keep pushing and it'll make it to 90. Typical driving range is about 100 miles -- good for a couple days' commuting for most folks -- and Aptera claims the 2e to get the energy equivalent of "more than 200 MPG." Best of all, a full eight-hour recharge (four hours is possible from a higher-voltage source) runs a grand total of

about \$1, which translates to a fuel cost of one cent per mile -- a number beyond any gas-powered car's dreams. Helping make all this possible is the lithium-based battery pack (not quite the same as lithium-ion -- the exact composition remains a secret for now), giving an edge in capacity over the lead-acid and nickel-metal hydride battery packs in past electric cars.

As far as our personal experience, well, our confinement to the passenger seat put a pretty low limit on our visceral impressions. But for what it's worth, the Aptera seemed like a reasonably refined car whose instant electric torque gives good punch in low-speed city driving. If you can live with the scant cargo room and limited rear visibility, you'll likely find the interior a decent place, with not-bad seats (made of recycled fabric, naturally), a roomy-enough cabin, and normal amenities like power windows, air conditioning, keyless entry, and a four-speaker MP3-compatible stereo. Thankfully, Aptera plans to hold the 2e to the same safety standards as regular cars (even though it's legally exempt), arming the interior with front and side airbags.

Those of you who keep up with the electric car scene might be thinking that the only such car on sale in the present, the Tesla Roadster, can travel twice the distance on a charge while also offering performance that's exponentially superior in every way. That's totally true, but in the world of battery-powered cars, results like those exact big-time cost penalties. In this case, that cost can be quantified by the number \$111,000, a price that makes the Tesla the most niche-like electric car to this day.

In contrast, Aptera's choice to emphasize practicality and happy mediums will result in the 2e being the first electric car for the masses, with a planned opening price of around \$25,000 (loaded versions can top 40 grand) when it hits California showrooms this October. In fact, if the numbers hold up, the 2e will also be the first electric car that pays for itself through fuel savings within a few years. Heck, it might even end up beating most hybrids on that count.

Speaking of which, Aptera plans to roll out hybrid and gas-powered versions of the 2e over the next few years, by which time sales will have spread to other states. But if you want a piece of the 2e sooner rather than later, you'll have to get in line behind the 4,000 Californians who have already put down deposits.