

BABY, YOU CAN DRIVE MY...

Everyone from artists and designers to MIT scientists and Toyota engineers is looking at ways to sustainably reinvent the wheel

BY JULIA COOKE

These five zero-emission vehicles are powered by humans or batteries, but it's creativity that truly propels them. The unconventional modes of transportation – whether at the concept stage, in limited production or already on the market – provide more power than a bike and more flexibility than a car. As unorthodox as they seem, these options could become viable and popular alternatives to pollution-spewing vehicles.

1 TOYOTA I-REAL

DESIGNED BY TOYOTA

Maybe concept “car” isn't the best way to dub the i-Real: it's a lithium-ion battery-powered personal mobility device that envelops the driver's body in a chairlike object. It's made of such plant-based materials as kenaf, a fibre in the same family as jute. At high speeds (a relative term, since it tops out at 30 kilometres per hour), it tips backwards; peripheral sensors around the chair alert the driver to imminent collisions.



2 ERGONOMIC BICITAXI

DESIGNED BY PEDRO REYES

Bicycle rickshaws in underdeveloped countries are an urban transportation plague – unsafe and unsightly. But Reyes's updated bicycle taxi, exhibited in art galleries in Madrid and Mexico City, illustrates the overlap of art and design: a cylindrical stainless steel body features cut-out bubbles for its ventilation, windshield and access; and multicoloured vinyl string seating sits three. It's designed to be safer for the driver, with a light body and recumbent seat, and will hit speeds of up to 20 kilometres per hour.

