Electric bicycles are boring, and mopeds are no more exciting either. But mix the two and you’ll get an astonishingly funky and attractive city vehicle – and a hybrid to boot...
Many think city motorbikes could give the much needed boost for the electric breakthrough. They are light and are by law restricted to slow speeds, both of which equate to low energy consumption. Also they are rarely used for cross country touring, meaning prospective owners would not need more than a range of a couple tens of kilometres. Thomas Bubilek, however, thought it was rather pointless to thus limit their potential and decided to make a better and more affordable version of the electric assisted city vehicle. The young designer turned to the automotive industry for inspiration and added a small petrol engine to the traditional pedelec, thereby effectively creating a hybrid capable of pure electric drive.
The parallel hybrid system is highly compact. The largest component is the starter battery of the single cylinder, 105 cc internal combustion engine, which means both the beautifully curved, robust frame and the entire vehicle is featherweight, hardly heavier than its rider, given that its creator has envisaged the Hybrid Sports
Bicycle (HSB) as a beginners' bike for young ladies.

As for looks, the 148 lb. two-wheeler appears to be a cross between modern touring enduros and century-old board track racing bikes. Where the narrow machine differs from its light footed ancestors is that it actually has a highly effective brake system where the oversized rotor and calliper are augmented by a brake energy regeneration system. While the existence of the latter is not specifically mentioned in the technical description it had better be included if the creator really wants to market his bike at the suggested retail price of $6-7000 – a reasonable price for a vehicle that can be used in a variety of ways.
That does not of course mean the HSB is without faults. The starter battery, for one, needs to go, both for weight considerations and in order to improve energy management. Its role could be easily taken over by the hybrid battery which is at the moment located in the front hub – a highly inconvenient place as it increases both unsprung weight and rotating masses, thereby reducing ride comfort and driveability. But the HSB does have a significant advantage over traditional hybrids: it can also be equipped with traditional pedals for human-powered, zero emission transportation.