

# Electric 3-cycle

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# What is the trikke?

- The Trikke -three-wheeled cambering vehicles are human powered machines that utilize Trikke Tech's patented 3CV technology to allow a rider to propel a chainless, pedal-less device forward without ever touching foot to ground. This elegantly simple construct provides a stable 3-point platform that lets riders lean into the turns while all three wheels remain in contact with the ground.



# Electric tricycle



- Is a vehicle with an electric motor used to power it.
- Uses rechargeable batteries and can travel 20 km/h or even more.
- It is intertwined also with the electricity supply and equipped with a throttle, a display that shows how full the battery is and with a switch to different modes of travel.

# How we built it

1. We found trikke construction on the internet and we made it ourselves, but, in a remodlled version.
2. We already had a bicycle with an installed electric motor.
3. We took off the batteries, the back wheel with electric motor and the handle bar with all the accessories.
4. We painted the tricycle and then all the parts were put together.

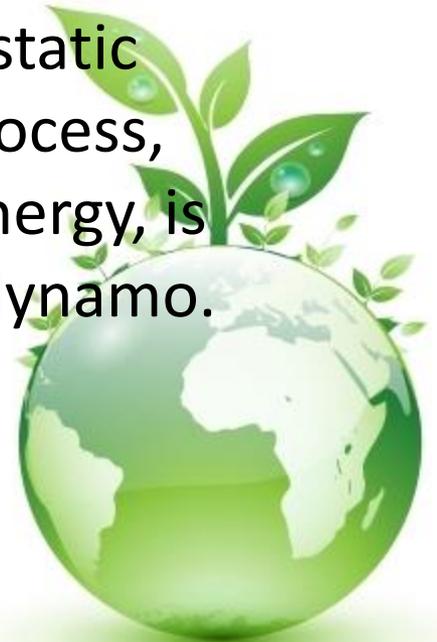






# Electric motor

- An electric motor converts electrical energy into mechanical energy. Most electric motors operate through interacting magnetic fields and current-carrying conductors to generate force, although electrostatic motors use electrostatic forces. The reverse process, producing electrical energy from mechanical energy, is done by generators such as an alternator or a dynamo.



# Electric motor

- Many types of electric motors can be run as generators, and vice versa. For example a generator for a gas turbine, or traction motors used on vehicles, often perform both tasks. Electric motors and generators are commonly referred to as electric machines.





# Characteristics :

|                |   |
|----------------|---|
| Motor          | Brushless; 180w 12v;<br>Maximum power: 350w |
| Weight         | 19,5 kg                                     |
| Wheels         |   |
| Range          | Up to 18 km                                 |
| Batteries      | 2x 12v / 8A<br>Lead acid battery            |
| Supply voltage | 24 V  |

# Characteristics :

|               |                                   |
|---------------|-----------------------------------|
| Charging time | 6-8 hours<br>Up to 280 chargings  |
| Brakes        | Disc on front wheel               |
| Current       | 8 Ah                              |
| Top speed     | 23 km/h<br>(electrical interlock) |
| Loudness      | Under 60db                        |
| Maximum load  | 110 kg                            |



# Advantages of e-3c

- Cheap energy
- Quiet motor
- Stable vehicle
- Speed
- Light construction of vehicle
- Can be ridden on steeper surfaces
- No pollution



# Disadvantages of e-3c

- First it must be pushed, before you can start it.
- Its charging time is 8 hours.
- Batteries have to be changed after 280 chargings.



# E-3c

- That masterpiece will be seen in practice next week.
- It needs some smaller modifications.



Any questions ???

