

6 – Customize your car

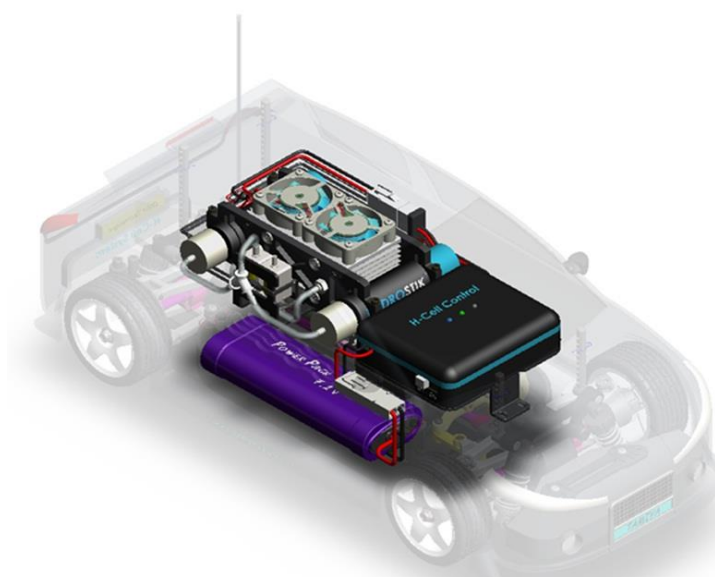
Based on prior analyses, what other uses for this system could be envisioned in the future in order to improve the environmental and economic impact?

6.1 Changing how you drive pg. 2

6.2 Changing the components of the energy system of the car..... pg. 3

6.3 Reducing various forms of resistance to motion pg. 4

6.4 Changing the mode of hydrogen production pg. 5



6 – Customize your car

Based on prior analyses, what other uses for this system could be envisioned in the future in order to improve the environmental and economic impact?

6.1 Changing how you drive

Study directions

How to drive while wasting as little energy as possible

There are many directions a project can take, and they must be chosen according to the means at your disposal and the conceptual content they offer. As an example, here are two directions we can take, with several project possibilities for each.

Direction 1: Limiting the amount of current consumed

Examples

- informing the driver of his average and immediate energy consumption, based on the data acquired by the on-board card.
- informing the driver, with a sound alarm, when he exceeds the pre-established energy consumption threshold.
- creating an energy consumption limiter

Direction 2: Limiting speed

Examples

- informing the driver, with a sound alarm, when he exceeds the pre-established speed threshold.
- creating a speed limiter

6 - Customize your car

Based on prior analyses, what other uses for this system could be envisioned in the future in order to improve the environmental and economic impact?

6.2
Changing
the components
of the energy
system of the car

**Study
directions**

How to best choose components to waste as little energy as possible

There are many directions a project can take, and they must be chosen according to the means at your disposal and the conceptual content they offer. As an example, here are two directions we can take, with several project possibilities for each.

Direction 1: The engine

Adapting the car to a different type of propulsion engine, that can use the electrical power provided by the current hybrid system.

Examples:

- modifying the current engine (bearings, coils, rotor...)
- Installing a brushless engine with the adequate speed controller

Direction 2: The transmission

Adapting the car to a different type of transmission between the engine and the driving wheels

Examples:

- modifying the installation of the gear drives and the coupling joints
- changing from 2- to 4-wheel drive
- changing the characteristics of the driving wheels

6 - Customize your car

Based on prior analyses, what other uses for this system could be envisioned in the future in order to improve the environmental and economic impact?

6.3
Reducing various
forms of resistance
to motion

**Study
directions**

How to best reduce external resistance sources to waste as little energy as possible

There are many directions a project can take, and they must be chosen according to the means at your disposal and the conceptual content they offer. As an example, here are three directions we can take, with project possibilities for each.

Direction 1: Aerodynamics

Improving the conditions of air penetration of the car

Direction 2: Tire/track friction

Improving the friction conditions between the tires and the track without affecting performance

Direction 3: Inertia of the car

Reducing the mass of some of the components

6 - Customize your car

Based on prior analyses, what other uses for this system could be envisioned in the future in order to improve the environmental and economic impact?

6.4
Changing the
mode of hydrogen
production

**Study
directions**

How to optimize the production of hydrogen to waste as little energy as possible

There are many directions a project can take, and they must be chosen according to the means at your disposal and the conceptual content they offer. As an example, here are two directions we can take.

Selecting other solutions to provide electric power to the "Hydrofill" station:

Direction 1: By using solar power

Direction 2: By using wind power