It’s the year 2028.

You wake up on a bright sunny day, get dressed and summon your self-driving, fly-enabled electric vehicle to your front door for a pick-up.

You and your family take a seat in your modern, eco-friendly ride. Your car’s personal and artificially intelligent assistant asks you about your destination and you say you’d like to visit the waterpark today.

Your AI assistant quickly analyzes the traffic conditions and your personal Universal Energy Credit account (UEC) status and gives you the following information:

“You have 5000 Universal Energy Credits in your account. These are the options available to reach your destination today:

1. Fly – Total trip time: 15 minutes; Energy credits needed: 2000 UEC
2. Underground hyper corridor: Total trip time: 35 minutes; Energy credits needed: 1000 UEC
3. By road – highway 44: Total trip time: 1 hour 20 minutes; Energy credits needed: 200 UEC

Which option would you prefer today?”

You choose to fly and your vehicle begins the journey by air.
On the way to the destination, the battery needs to be charged and your vehicle quickly lands onto one of the perpetually charged lanes on the highway below. It continues to drive over the road whilst simultaneously charging itself through its intelligently designed conductive wheels.

These roads are designed as giant induction pads with perpetual charge and receive their power from space based solar satellites which transmit power in the form of radio-waves to the rectennas built into vegetation or below the ground with normally growing foliage above them.
These rectennas are designed to power the roads above, and the underground hyper transportation corridor below them.

The highways could be designed to have slower lanes which perpetually charge vehicles over them and faster lanes where the vehicles use their own battery’s charge.
As soon as the charge is sufficient, your vehicle takes to the sky once again and drops you off at your destination.

In the evening, back home, you realize that you’ve used up more energy credits than you’d like to and decide not to spend money to buy more energy credits from the grid.

You decide to create energy credits by going for an evening jog on the neighborhood ‘motion-energy harnessing roads’. Your kids decide to accompany you and ride their cycles along you and this also helps as a bonus with the energy harnessing. The energy created is transferred through these roads to the common power grid of your city and UEC are credited to your personal account.

Later that evening, you go to the local recycle station and deposit recyclable waste to create more UEC.

You also decide to walk down to work the next day!

You wish your family a goodnight and and call it a day!
Introduction:

Mobility and transportation is perhaps one of the most important aspects of human civilization and has a direct impact on almost every important aspect of our modern world – from economy to environment and it ultimately also has a direct impact on our evolution as a successful species in the future.

What should we aim at achieving with regards to the future of mobility?

Imagine water flowing through a pipe – the flow would be smooth until the amount of water and the pressure exerted by it is within limits. However, as the water quantity increases, there is a potential risk for the pipe to break!

Similarly, the astounding rate at which our population is growing, logistic requirements for mobility are bound to put extreme pressure on the planet and it will be only a matter of time till the mobility-ecosystem collapses under this pressure.

In the above-mentioned example, the pressure in the water pipe can be lowered by adding supplementary pipes to the main pipe.

Similarly, when it comes to human mobility, we need to add supplementary and adjunct modes of transportation and aim to distribute the flow equally amongst those modes of transport. It would be ideal if the population can somehow be internally motivated to maximize use of all the different transportation options available to them.

What are the essential components of a smoothly flowing mobile world?

The following things are paramount:

1. **Perpetual energy:***

   a. A constant source of clean energy to perpetually charge all vehicles as they move is of paramount importance. One way this could be achieved is by using the power of space based solar energy. Power could be relayed to the earth from solar mining satellites in the form of radio-waves which could pass through foliage and reach rectennas built below the ground to convert these signals to power. This technology could allow vegetative lands to double-up as energy harnessing lands.

   b. Perpetually charged roads – the roads could be designed as giant induction pads which could be linked to the underground rectennas. These rectennas could also power underground hyper corridors simultaneously.

2. **Vehicle design:**

   a. Autonomous, electric vehicles with the ability to use most modes of transportation including flying, driving or using water bodies need to be designed for our future generations. Wheels could be designed to be conductive and charge the vehicles as they drive over the perpetually charged roads.
3. Crowd energy harnessing:

Every drop of water adds up to fill a bucket!

When it comes to power, the current trend is that usually one organization (the local government) oversees arranging power for the entire population of the city.

However, considering the number of people on the planet, it would be extremely beneficial if every single one of us was able to contribute a tiny amount of energy to the common power grid. This way energy and power could be made abundant enough to reach every human being alive in the remotest of places.

4. ENERGY CREDITS – In the present-day scenario, everything we do utilizes energy - from our homes to cars and offices. We pay different bills for using different types of energy.

However, if a common unit of energy consumption could be devised and for example, named the Universal Energy Credit – tracking energy usage and creation could be drastically simplified.

Imagine the millions of foot falls on roads and all the bike pedals that turn everyday all over the world – it would be amazing if human movements could somehow be converted to energy - harnessed and then sent to the common grid. The energy created by every individual could be
tracked by their smart handheld devices and added to their accounts as Universal Energy Credits (UCE).

The UEC required for various activities could be calculated in real-time depending upon the current usage and availability of transportation space. The users could then decide the mode of transportation depending on their available credit units.

Energy credits could be mined or accumulated by various methods like solar roofs at home, walking to work, cycling, garbage recycling to name a few.

These credits could act as an important way of internally motivating people to use different forms of transportation and mobility available.

**Conclusion:**

By combining various technology trends such as AI, Autonomous vehicles, intelligent vehicle design along with creating a single, universal unit of power consumption and creation, the future of mobility could be planned to work as a well-oiled and free flowing machine.

By allowing energy creation to be integrated with the power of crowd sourcing (population being our biggest asset), future generations could be made to be internally motivated to utilize various modes of transportation available to them, thus allowing a better distribution and help in maintaining a smooth flow of mobility.