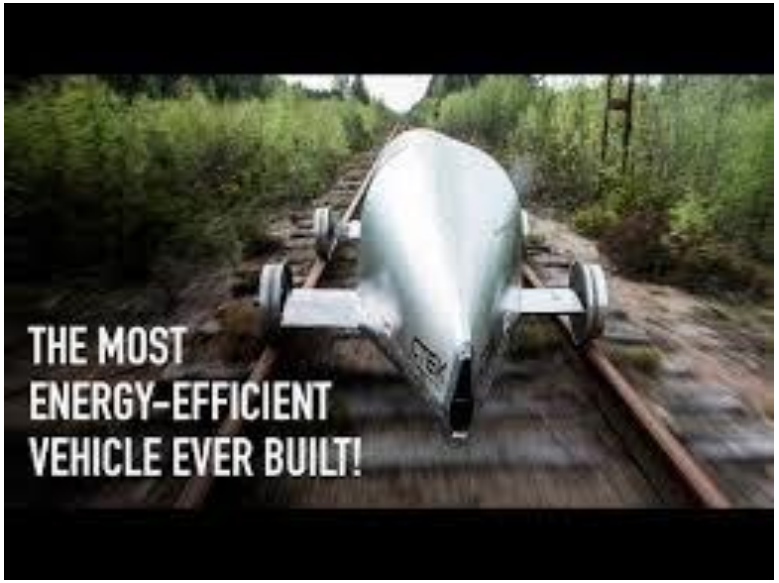
Railvelution



Development of rail-vehicles driven by green energy.

Advantages

- Extremely low rolling resistance coefficient compared with road transport. ± 2% which results at present 0,6 Wh/km/person!! Equivalent to 0,066 ml of petrol per person/p.km!!
- No driver necessary. Drives autonomic.
- 82% of the cars on the road carry only one person. The E-rail vehicle has room for 2 persons. So always at least 50% occupancy.
- No traffic jam.

Direct economic aspects

Establishment rail network

Assembling rail vehicles

ICT solutions

Indirect economic aspects

Cheap transport

Fast delivery goods

New industrial parks

Boosting tourism

Transport of persons

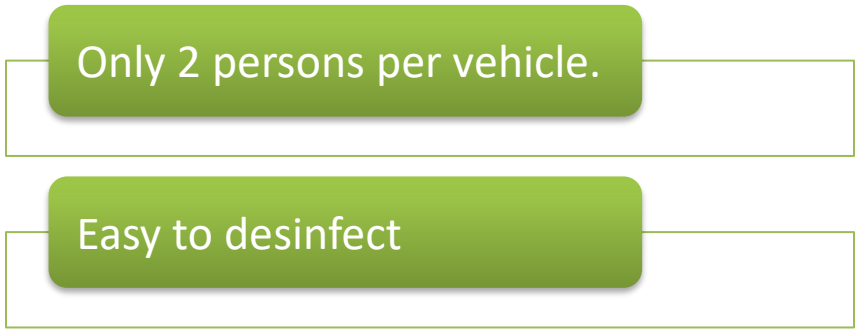
Most common reason of travel:

- Work
- Family
- Cost of transport

Exploitation

- By different companies to ensure competition
- On basis of kilometers or subscription.

Corona proof travel



- In contrary with commuter trains, the e-vehicles offers room for 1 or 2 persons.
- During pandemics it is easy to set up cleaning facilities on every station.

Billion Euro industry

1. Construction of railway networks
2. Supply of rails, vehicles, infrastructure
3. Software development and maintenance
4. Development of industrial parks
5. Modern, cheap and swift transport of persons and cargo
6. Development of tourism

Transport of Cargo

- In general agro products.
- Sales in nearby markets
- Transport to logistic hubs
- Development of hubs
- Webshop deliveries

Development of business parks

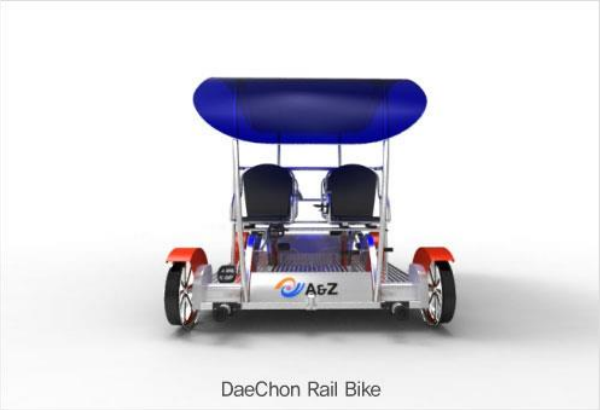
- Logistic hubs
- Processing of agro products
- Clustering activities like fish farming, shea butter processing.
- Tourist centers

New cities

- Separation business parks & living areas
- Relation with business parks.
- Distance from overcrowded areas.
- Cheaper and more comfortable locations.

Development of tourism

- Travel through scenic landscapes
- No noise for wild life.
- Set up of service oriented business alongside the railway like hotels and restaurants.



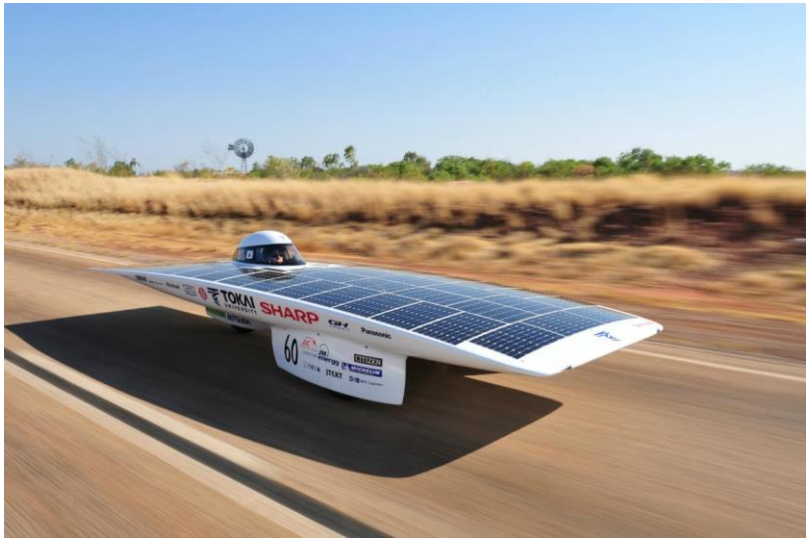
DaeChon Rail Bike

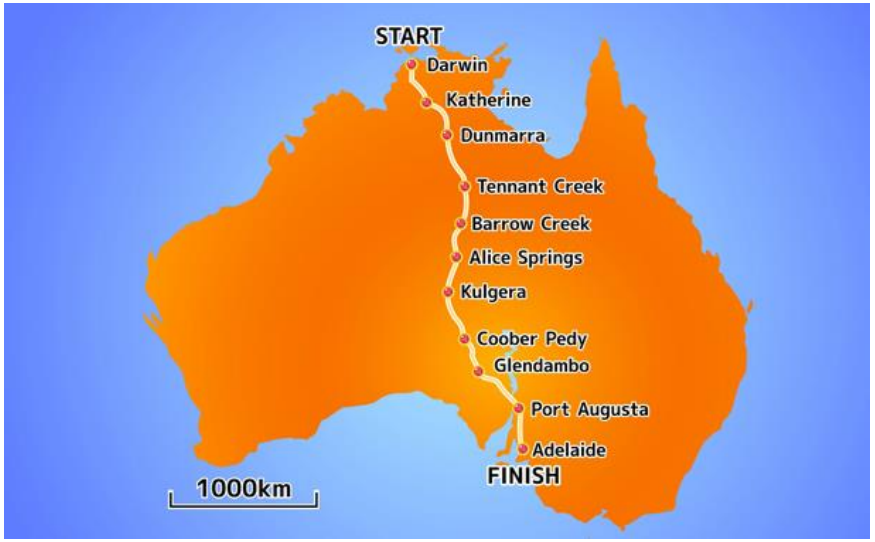
How to realize

1. Media attention through organizing races like solar race in Australia.
2. Setting up cooperation between foreign and local universities.
3. Setting up infra-structure in cooperation with local Ministry of Transport and of Tourism.

Solar race Australia

Number of teams in 2017: 42 teams from 21 countries
Most of them technical universities.
Winners: Dutch teams (Delft & Eindhoven) in two different categories.





Desired Partners

- Ministry of Roads & Railway development
- Ministry of Tourism
- African Technical University
- Int’l travel organization
- Rainbow Sustainable Solutions – Dutch
- African company

Future developments in African context

- Without driver & remote controlled
- Cargo transport without driver
- Low maintenance railways
- Standardization
- Border crossings between bonded warehouses
- Local production of solar rail-E’bikes.
- Very low transport costs per person or kilo.
- Close to zero emissions.

Contact

- **Rainbow Sustainable Solutions**
  - John Limmen
  - Tel.: 06.11588898 of 0251.244592
  - Email: dzjohn@ziggo.nl
- **Dot Robot**
  - Willem Zwetsloot
  - Tel.: 015 202 6133 of 06.83606685
  - willem.zwetsloot@dotrobotsystems.com