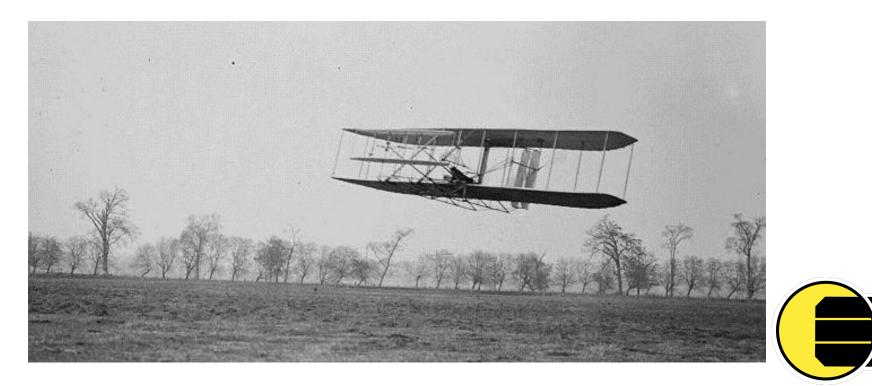
## The role of technology in bringing us to a Carbon-neutral Future



Allan Gray - sunE April 18, 2020

#### SPECIAL REPORT

### Global Warming of 1.5 °C

An IPCC special report on the impacts of global warming of 1.5 °C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty.

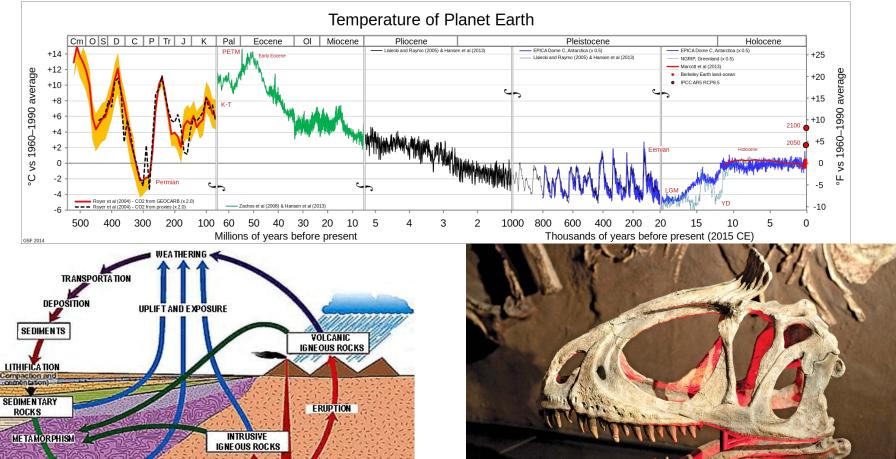
" Pour ce qui est de l'avenir, il ne s'agit pas de le prévoir, mais de le rendre possible. " – Antoine de Saint Exupéry, Citadelle, 1948 We have already locked in some global warming

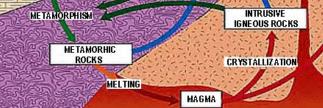
## The question is how far we plan to take it.

1.5°C is the threshold where Coral reefs have very low likelihood of survival (see SR15)

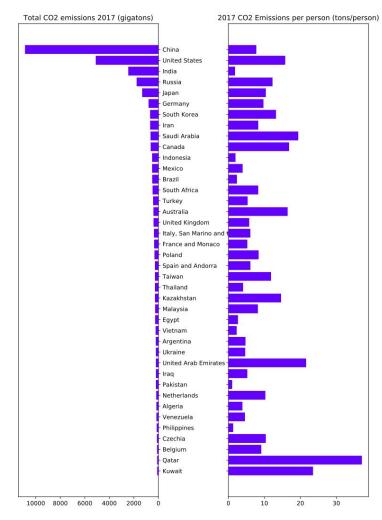






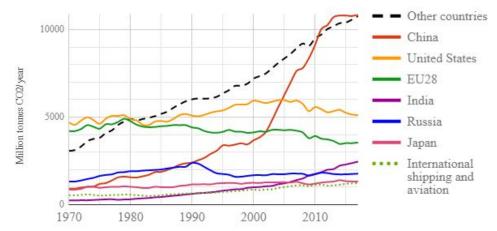






https://en.wikipedia.org/wiki/List of countries by carbon dioxide emissions

World fossil carbon dioxide emission 1970-2017



At current consumption, our 'Carbon Budget' runs out sometime before 2030

Led by China, the rest of the world is rapidly improving their quality of life.

China is still 50% per capita emissions of the US (Canada & Saudi are higher)

### The Emerging Carbon Market









- LESS" a bullfrogpower company

### Offset my flight

#### Thank you!

You have successfully reduced your impact with Less Emissions!

We have received your payment of \$122.35 CAD to purchase 5.098 tonnes  $CO_2e$  of VER+ Standard-Certified Canadian Offsets.

These offsets will be retired to the environment on your behalf.

For your records, we will forward a copy of this confirmation to the email address you provided, allan.gray@sunEtrike.com. If you do not receive this receipt, please contact us at info@less.ca or by telephone at 1-877-573-3669.

Congratulations! You're now lessening your environmental footprint, supporting innovative emissions reductions projects and making the responsible travel decision.

Best regards, The Less Team

# kgCO2/km for Gas & Electric tricycle (using bulk grid and 80% solar contribution)







- Above-average stable wages
- Job security
- Access to healthcare and other government services

### What it means for our drivers and staff

### **Institutional & Market Responses**



### ADB & DOE USD500 million

4 years to develop.

### PROJECT SCRAPPED only 3000 vehicles built



Private electric vehicle dealerships

**BUYER BEWARE!** 

## SOLARIMPULSE

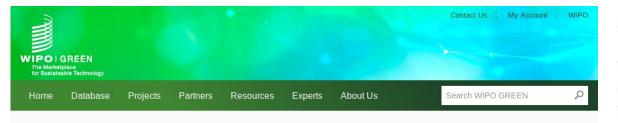
When I was flying around the world in my solar airplane, I remember looking at the sun that was giving energy to my four electric motors and their huge propellers. There was no noise, no pollution, no fuel... and I could fly forever."

**Bertrand Piccard** 



### **8 Months of Due- Diligence Later**





#### WIPO GREEN – The Marketplace for Sustainable Technology

WIPO GREEN is an online platform for technology exchange. It supports global efforts to address climate change by connecting providers and seekers of environmentally friendly technologies. Through its database, network and acceleration projects, it brings together key players to catalyze green technology innovation and diffusion.

▶ What are green technologies?

Demand for green technology is expected to grow by 6.9 percent annually to 5,902 billion euro in 2025,

FEATURED



On this page -

Impact Story: Water from sunlight and air for a school in Indonesia

#### Goals

To accelerate the transition to a greener global economy, WIPO GREEN in the next five years will:

#### Goal 1:

Link green technology providers and those seeking solutions in a targeted manner, catalyzing and maximizing the potential for green technology transfer and diffusion.

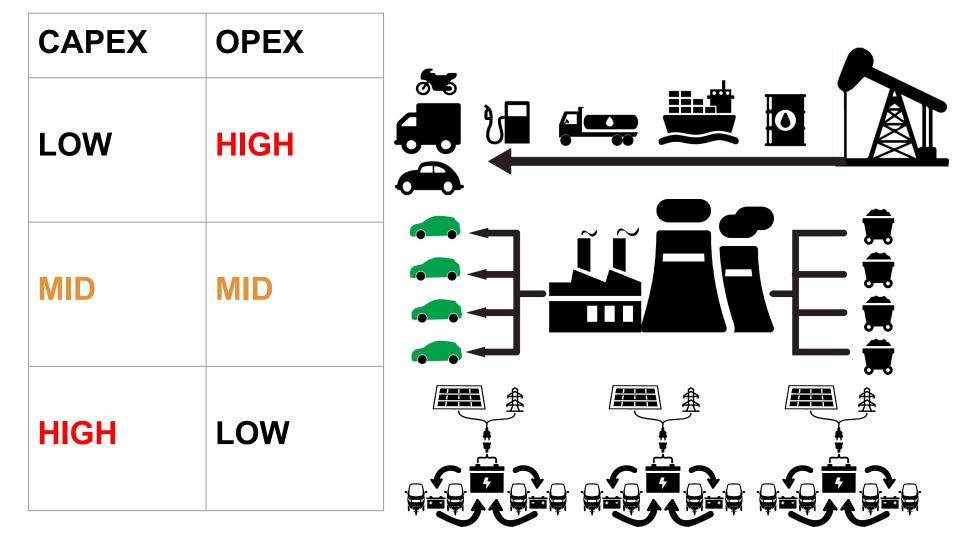
#### Goal 2:

Accelerate access to green technology innovation opportunities for countries at all levels of development.

#### Goal 3:

Support member states to leverage IP and innovation in global efforts to address major policy issues related to climate change, food security, and the environment.

Source - WIPO GREEN Strategic Plan 2019-2023

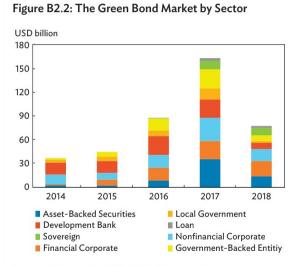


### **Green Bonds**

Green bonds are a key tool for governments to raise capital to implement emissions reduction and new infrastructure plans in line with their Nationally Determined Contributions as set out in the Paris Agreement—the commitment to keep global warming to a maximum of 2C.



Energy - 35%, Buildings - 30%, Transport - 16%



Note: Data for 2018 through first half of the year only. Source: Climate Bonds Initiative.



Founded: 1963

HQ: Manila, Philippines

### 151b in Capital

\$20.1 B Loans, Grants, and Others \$201 M Technical Assistance \$11.9 B

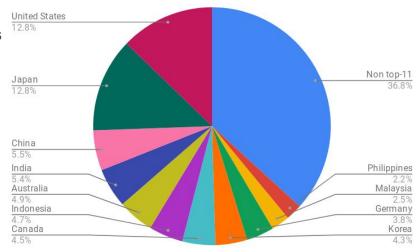
Cofinancing, incl Trust Funds



#### **List Of Presidents**

#### Name Dates Nationality

Takeshi Watanabe	1966–1972
Shiro Inoue	1972–1976
Taroichi Yoshida	1976–1981
Masao Fujioka	1981–1989
Kimimasa Tarumizu	1989–1993
Mitsuo Sato	1993–1999
Tadao Chino	1999–2005
Haruhiko Kuroda	2005–2013
Takehiko Nakao	2013–



ADB Annual Report - 2017 - adb.org

### **Rotary as a Global Institution**







