



FIG WORKING WEEK 2023

28 May - 1 June 2023 Orlando Florida USA

Protecting
Our World,
Conquering
New Frontiers

FIG Climate Compass Task Force

Reimagining the Climate Action Agenda for the Global
Surveying Community

SIMON IRONSIDE (New Zealand)

FIG CLIMATE COMPASS TASK FORCE

Co-Chair FIG WORKING GROUP 4.3 – MAPPING THE PLASTIC
a joint Commission 4 (Hydrography) and Young Surveyors Network
initiative



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Some climate change facts...

- The long term shifts in temperatures and weather patterns
- Occurs naturally – large volcanic eruptions or changes in the sun's activities
- Humans are responsible for virtually all global heating over the last 200 years
- Since the 1800's the main driver for climate change has been the burning of fossil fuels
- The resulting greenhouse gas emissions 'blanket' the Earth, trapping the sun's heat and raising temperatures
- Carbon dioxide and methane are the main greenhouse gases causing climate change

<https://www.un.org/en/climatechange/what-is-climate-change>

The effects of global warming are not good...

- The Earth's temperature is 1.1°C warmer than before the industrial revolution
- It is warmer now than at any time in the last 100,000 years
- The decade 2011 – 2020 was the warmest on record
- The consequences of climate change include (among others) drought, water scarcity, fire, rising sea levels, flooding, melting polar ice, catastrophic storms and declining biodiversity
- It affects our health, ability to grow food, housing, safety and work.
- People in SIDS and developing countries are already vulnerable to climate impacts

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The choice for the global surveying community is clear...

- **Climate change is here**
- **We need to adapt and mitigate the effects now to protect ourselves and our communities**
- **Societies need to become more resilient to climate impacts**
- **Large scale efforts to be led by governments - \$300 billion needed every year from 2030 (for 2nd and 3rd world countries)**
- **Adaptation, mitigation and resilience building will need surveyor involvement**
- **We can, and should, be at the forefront of the global response to climate change.**

<https://www.un.org/en/climatechange/climate-adaptation>

The oceans are the biggest ally against climate change...

- The oceans generate 50% of the oxygen we need, absorbs 25% of all carbon dioxide emissions and captures 90% of the excess heat generated by these emissions
- The oceans are central to reducing global greenhouse gas emissions and stabilizing the Earth's climate.
- However, increasing greenhouse gas emissions are affecting the health of the oceans
- Safeguarding the oceans is key to attaining climate 'normality'
- The battle against the plastic pollution of our oceans is also the battle for the Earth's climate



**By 2050 WWF estimates there will be more plastic in the ocean than fish,
by weight**

What can we do?

- Headlines like these represent opportunities for our profession...

