

# Climate change and its effects on St. Maarten.



Sociaal Economische Raad  
Social Economic Council



Presentation AICESIS members Latin America & Caribbean region.

December 7<sup>th</sup>, 2021



Sociaal Economische Raad  
Social Economic Council

# Table of contents.

3. St. Maarten
4. Uniqueness of Small Islands (St. Maarten)
5. Carbon dioxide emissions
6. Carbon dioxide - Cruise ships
7. Rising sea level on St. Maarten
8. Hurricanes
9. Video footage hurricane Irma
10. Recommendations
11. Questions



Sociaal Economische Raad  
Social Economic Council

# St. Maarten.



- **Population:** 40,614 (January 2018)
- **Population density:** 1221 km<sup>2</sup>
- **Capital:** Philipsburg
- **Area:** 37 km<sup>2</sup>
- **Official languages:** English & Dutch
- **Currency:** Antillean guilder (ANG)  
United States dollar (USD)
- **National holiday:** November 11<sup>th</sup>

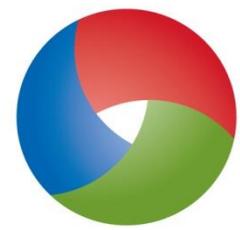


Sociaal Economische Raad  
Social Economic Council

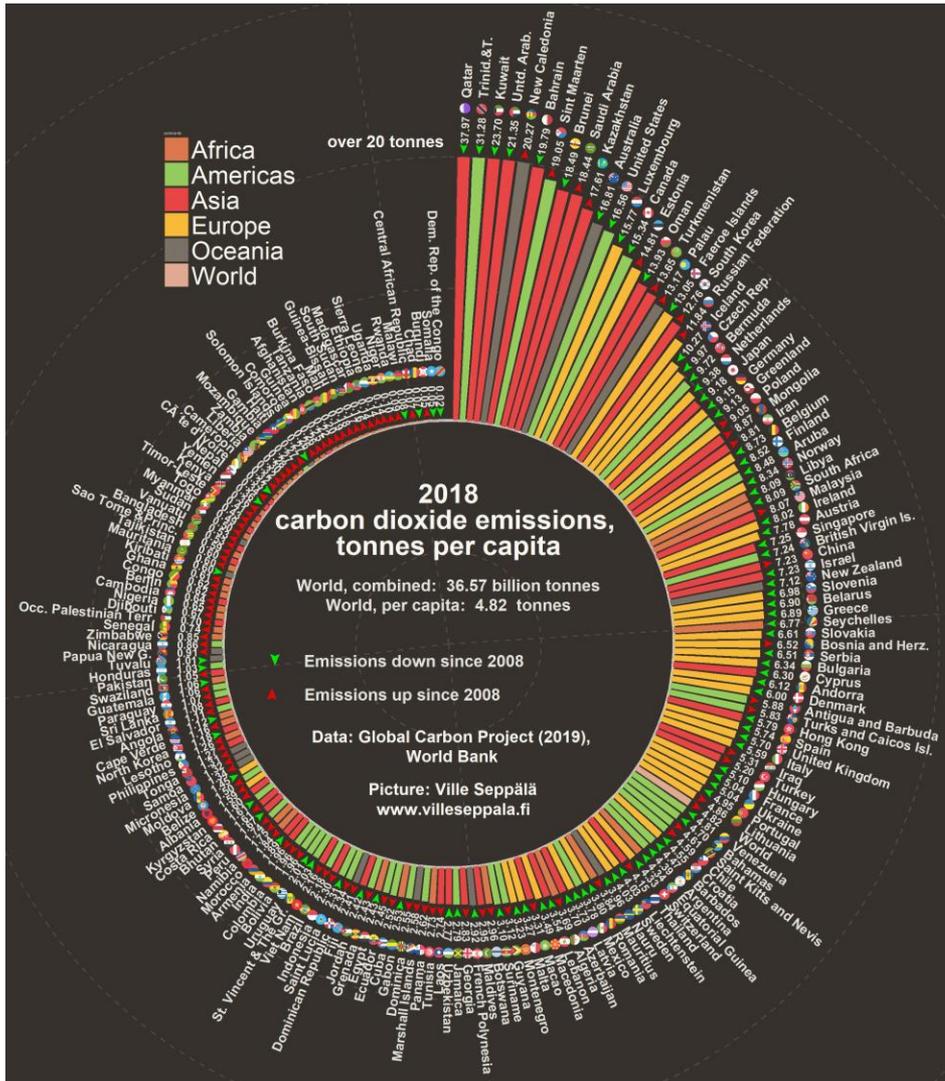
# Uniqueness of Small Islands (St. Maarten).

- Small islands are highly exposed to natural hazards.
- The limited physical size means that these islands may not be able to physically adapt to these changing conditions.
- Limited natural resources and isolated nature could further increase dependence on imports.
- High population densities, particularly along the coastline could threaten the very livelihood of these islands.
- Lastly, limitations concerning funding and human resources could hinder islands' ability to adapt fast enough to keep pace with climate change.

# Carbon dioxide emissions.



Sociaal Economische Raad  
Social Economic Council



- St. Maarten is ranked number 1 in the Caribbean for Carbon dioxide emissions 20 tonnes per person.
- In St. Maarten, almost ten kilos per person of daily waste is generated and discarded.
- Ten kilos of waste is more than the total per capita average of the other five Dutch Caribbean islands combined.



Sociaal Economische Raad

Social Economic Council

# Carbon dioxide emissions cruise ships.



Source: St. Maarten Harbor group of companies

- Each engine burns 1,377 US gallons of fuel an hour, or about 66,000 gallons a day.
- The biggest issue with cruise emissions are the levels of nitrogen oxide:
  - Acid rain
  - Higher rates of cancer
  - Respiratory diseases.



Sociaal Economische Raad  
Social Economic Council

# Rising sea level on Sint Maarten.



Source: St. Maarten Nature Foundation

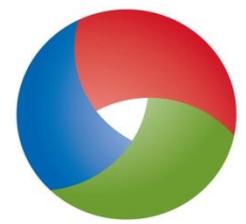
Sea level 2017

Projected sea level rise with 5 meters in twenty to fifty years



Source: St. Maarten Nature Foundation

# Hurricanes on St. Maarten.



Sociaal Economische Raad  
Social Economic Council

- September 6, 2017.
- Hurricane Irma category 5+ winds of 185 mph (296 km/h)
- The damage on Sint Maarten was estimated at USD.2.1 billion.
- The Netherlands has established a trust fund of \$ 550 million over a 7-year period for the rebuilding of St. Maarten.

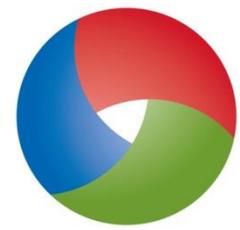


# Footage of destruction hurricane Irma continued.



Sociaal Economische Raad  
Social Economic Council





Sociaal Economische Raad  
Social Economic Council

# Recommendations.

## Government Actions

- Review of Environmental Protection Legislation.
- Establish a Disaster Fund for cleanup efforts and reconstruction costs.
- Enhance drainage systems and flood barriers.
- Improve building standards and enforce them.

## General recommendations

- **Educating** citizens to become conscious, convinced, and convicted about the issue to become resilient societies who are climate-smart.
- **Adaption for change**, so that we and others can live with the changing climate concerning farming practices, building practices, water harvesting, policies, and programs.
- **Mitigation** so we can reduce the number of greenhouse gases we put in the atmosphere with respect to energy, waste, forests, transportation.

# Questions



**Sociaal Economische Raad**  
**Social Economic Council**

Thank you .....

**Social Economic Council**  
Harbor View Office Complex  
Sparrow Road # 4, building 2 / Unit 4K  
Philipsburg, Sint Maarten  
Dutch Caribbean  
E-mail : [info@sersxm.org](mailto:info@sersxm.org)  
Tel: + (1721) 542-6040