Ecosystem Classifier

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- Stakeholder Presentation #2-
11/04/2024

1. Our Organization

2. Goals & Success

3. Possible stakeholders

4. Key Problem & Solutions

5. Progress

<u>Goals</u>

- *Guide governmental conservation efforts*

- *Raise awareness and understand the urgency of the biodiversity crisis due to climate change*

Our success

- *Intercontinental changes to slow down climate change*

Our success

- *Open and easy access source for organizations and public*

Department for analyses and visualizations

User target

1 NGOs, Research Institutions & Governments

2 Environmental Scientists & Conservationists

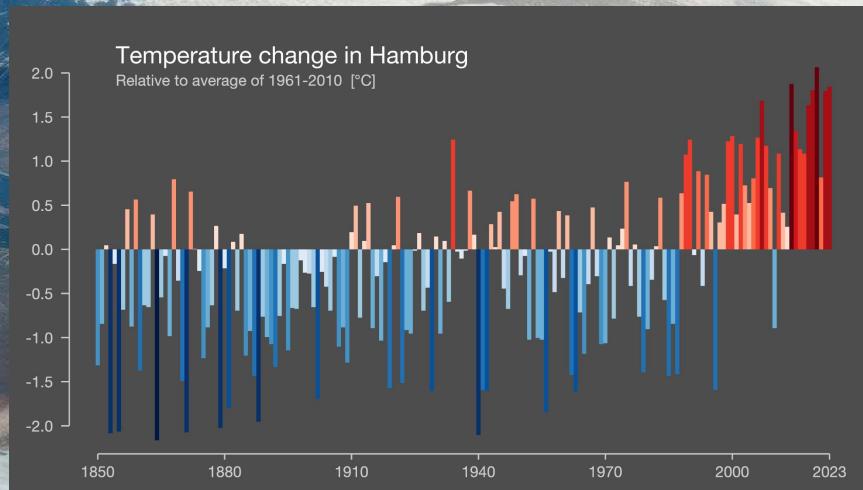3 Educators & Students

Key problem

Rising temperatures

Increasing extinction rate

- Loss of farmland
- Loss material resourcing
- Soil erosion and loss of fertility

Key problem

Rising temperatures

Temperature change in Hamburg
Relative to average of 1961-2010 [°C]

Potential solution and conservation/restoration efforts

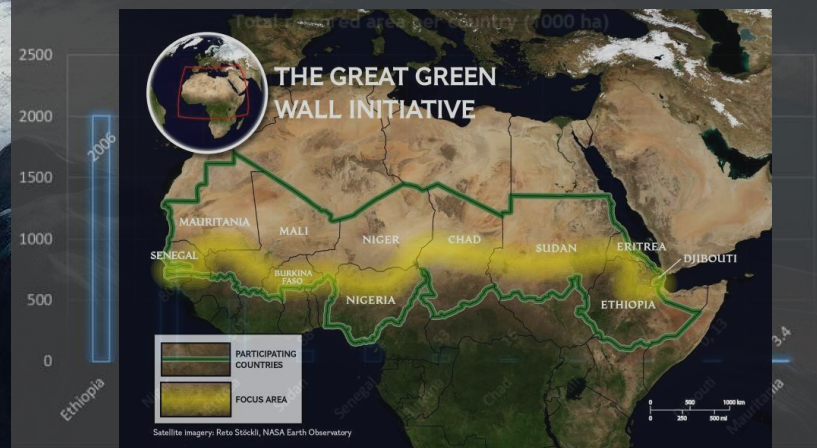- *Great Green Wall Initiative (Africa)*

Solution in numbers

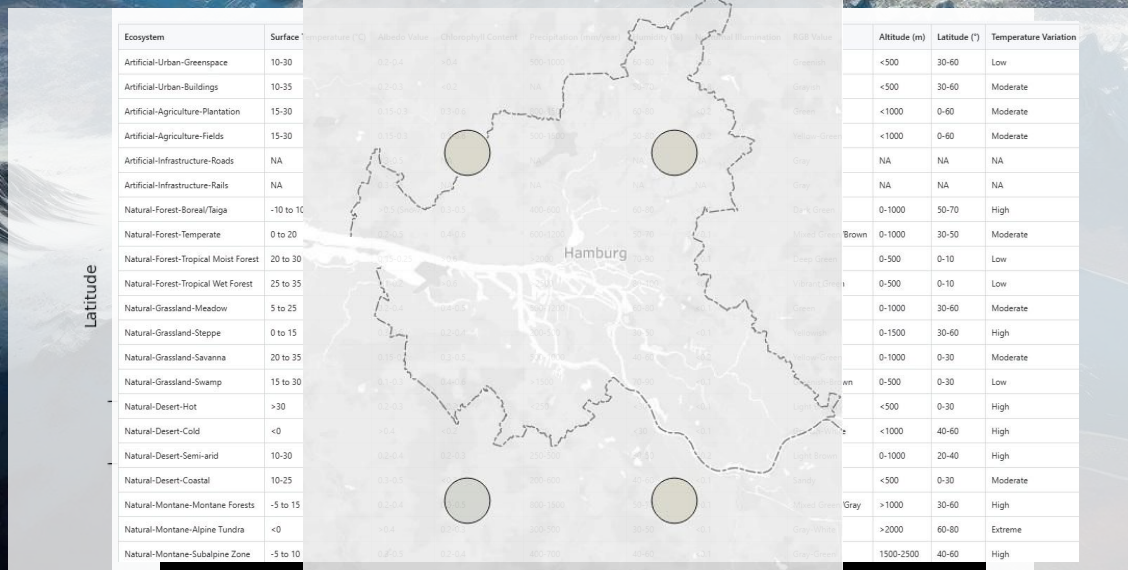## Great Green Wall Initiative

Start 2007   2030: 100.000.000 ha   2024: 20.000.000

Goal for 2030:
250 million tons CO_2

Progress

- ## Define the classifier

Ecosystem	Surface	Temperature (°C)	Albedo Value	Chlorophyll Content	Precipitation (mm/year)	Humidity (%)	Illumination	RGB Value	Altitude (m)	Latitude (°)	Temperature Variation
Artificial-Urban-Greenspace	10-30		0.2-0.4	>0.4	500-1000			Green	<500	30-60	Low
Artificial-Urban-Buildings	10-35		0.2-0.3	NA	NA			Gray	<500	30-60	Moderate
Artificial-Agriculture-Plantation	15-30		0.15-0.3	>0.4				Green	<1000	0-60	Moderate
Artificial-Agriculture-Fields	15-30		0.15-0.3	>0.4				Yellow-Green	<1000	0-60	Moderate
Artificial-Infrastructure-Roads	NA							Gray	NA	NA	NA
Artificial-Infrastructure-Rails	NA							Gray	NA	NA	NA
Natural-Forest-Boreal/Taiga	-10 to 10				40-60			Dark Green	0-1000	50-70	High
Natural-Forest-Temperate	0 to 20		0.2-0.3	>0.4	600-1000			Mixed Green/Brown	0-1000	30-50	Moderate
Natural-Forest-Tropical Moist Forest	20 to 30							Deep Green	0-500	0-10	Low
Natural-Forest-Tropical Wet Forest	25 to 35							Vibrant Green	0-500	0-10	Low
Natural-Grassland-Meadow	5 to 25							Green	0-1000	30-60	Moderate
Natural-Grassland-Steppe	0 to 15							Yellowish	0-1500	30-60	High
Natural-Grassland-Savanna	20 to 35							Yellow-Brown	0-500	0-30	Moderate
Natural-Grassland-Swamp	15 to 30							Brown	0-500	0-30	Low
Natural-Desert-Hot	>30							Light-Tan	<500	0-30	High
Natural-Desert-Cold	<0		>0.4					White	<1000	40-60	High
Natural-Desert-Semi-arid	10-30		0.2-0.3					Light-Brown	0-1000	20-40	High
Natural-Desert-Coastal	10-25		0.1-0.3		300-400			Sandy	<500	0-30	Moderate
Natural-Montane-Montane Forests	-5 to 15		0.2-0.4	>0.3	800-1000			Mixed Green/Gray	>1000	30-60	High
Natural-Montane-Alpine Tundra	<0		>0.4		200-600			Gray-White	>2000	60-80	Extreme
Natural-Montane-Subalpine Zone	-5 to 10		0.3-0.5		400-700			Gray-Green	1500-2500	40-60	High

Latitude

Thank you for attention!

Q & A