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INTERNATIONAL LAW RESPONSES TO PLANETARY THREATS: ARTIFICIAL INTELLIGENCE LAW & SUSTAINABILITY

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OVERVIEW

- Dual nature of AI's relationship with sustainability

- AI as a problem and as a solution

- International law responses and options
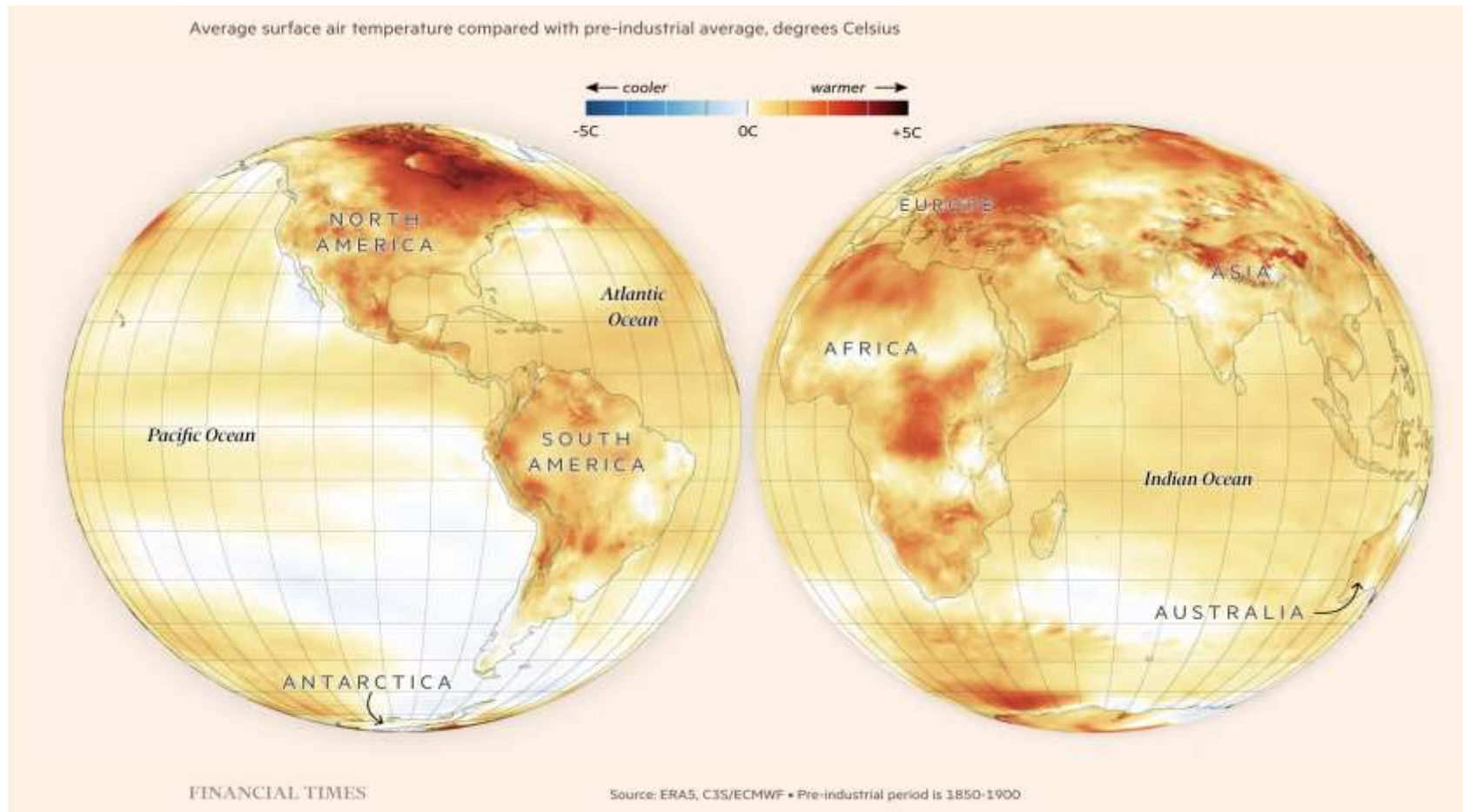
CLIMATE EMERGENCY IN CONTEXT

LOS ANGELES WILDFIRES, JANUARY 2025

2024 was the hottest year on record and the first to breach 1.5C

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Average surface air temperature compared with pre-industrial average, degrees Celsius

cooler ← → warmer
-5C   0C   +5C

NORTH AMERICA

Atlantic Ocean

Pacific Ocean

SOUTH AMERICA

EUROPE

ASIA

AFRICA

Indian Ocean

AUSTRALIA

ANTARCTICA

FINANCIAL TIMES

Source: ERA5, C3S/ECMWF • Pre-industrial period is 1850-1900

Common carbon footprint benchmarks

in lbs of CO2 equivalent

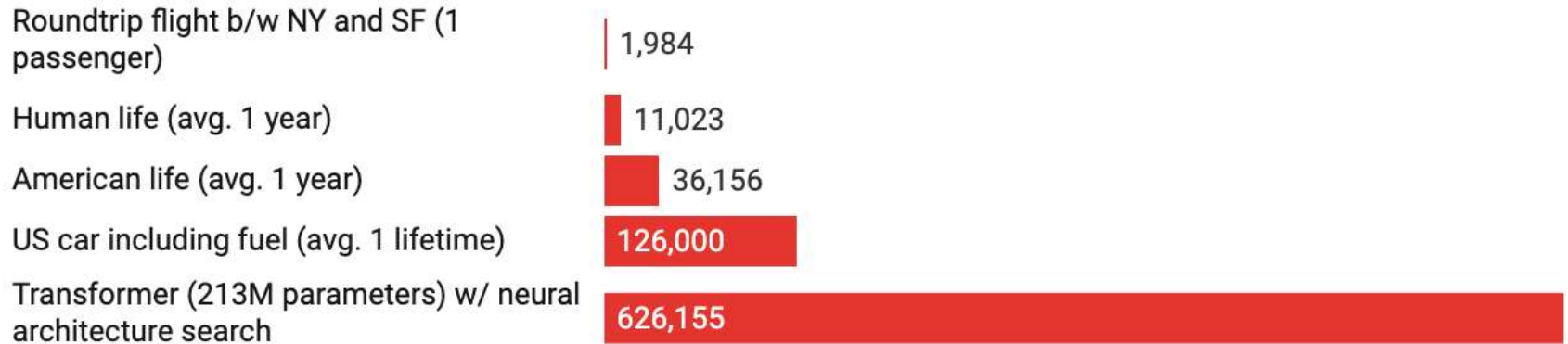|	
Roundtrip flight b/w NY and SF (1 passenger)	1,984
Human life (avg. 1 year)	11,023
American life (avg. 1 year)	36,156
US car including fuel (avg. 1 lifetime)	126,000
Transformer (213M parameters) w/ neural architecture search	626,155

Chart: MIT Technology Review • Source: Strubell et al. • Created with Datawrapper

"AI holds immense promise for addressing global challenges, but its development must be guided by principles of sustainability. We cannot afford to let its environmental footprint undermine the very goals it seeks to achieve."

(International Energy Agency, 2023

Opportunities

- Climate Modelling and Prediction
- Efficiency savings
- Precision Agriculture
- Renewable Energy Integration
- Environmental Monitoring
- Materials Science

Risks

- Energy Consumption & Heating
- Resource Depletion
- E-waste
- Algorithmic Bias
- Unforeseen Consequences
- Climate change
- Water scarcity

BUILDING UPON EXISTING FRAMEWORKS: INTERNATIONAL LAW AND AI

2024:

COUNCIL OF EUROPE AI CONVENTION

INTERNATIONAL TELECOMMUNICATION UNION

UNESCO

ISO/IEC 42001

- **Treaties**
- **Soft Law**
- **Instruments**
- **Bodies**
- **AI as a tool to facilitate international agreements on sustainability**
- **Creative thinkin**

THANK YOU