

# Harnessing the Fourth Industrial Revolution for Nature

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**artificial intelligence  
machine learning**

**AR / VR  
mixed reality**



**advanced  
sensor platforms**

**(x)D printing**

## **technologies driving the 4IR**

**biotechnologies**

**autonomous  
vehicles**

**new materials**

**?????**

**geo-engineering**

**new computing  
technologies**

## Fourth Industrial Revolution technologies *could* :

create new forms  
of agency

provide a  
foundation for  
global governance

create models for  
better management  
of ecosystems

help secure the  
world through new  
forms of  
transparency

inspire new data  
regulations and  
policies

shape new  
communities with  
both local and  
global reach

usher in an era of  
sustainable  
products and  
services

Rapidly mitigate  
climate change and  
support ecosystem  
adaptation

promote clear  
accountability and  
data-driven  
decision making

spur innovation and  
new forms of  
growth

## Fourth Industrial Revolution technologies *could* :

compromise  
human agency

undermine the  
traditional roles  
played by the  
nation state

have unanticipated  
consequences that  
irreversibly damage  
ecosystems

democratize the  
ability to make  
massively  
destructive  
weapons

render existing  
online security  
protocols useless

dissolve  
communities,  
institutions, and  
social structures

produce non-  
degradable and  
toxic products

have negative  
effects on the  
climate and  
environment

obscure lines of  
accountability for  
decision-making

make economic  
systems more  
fragile and volatile





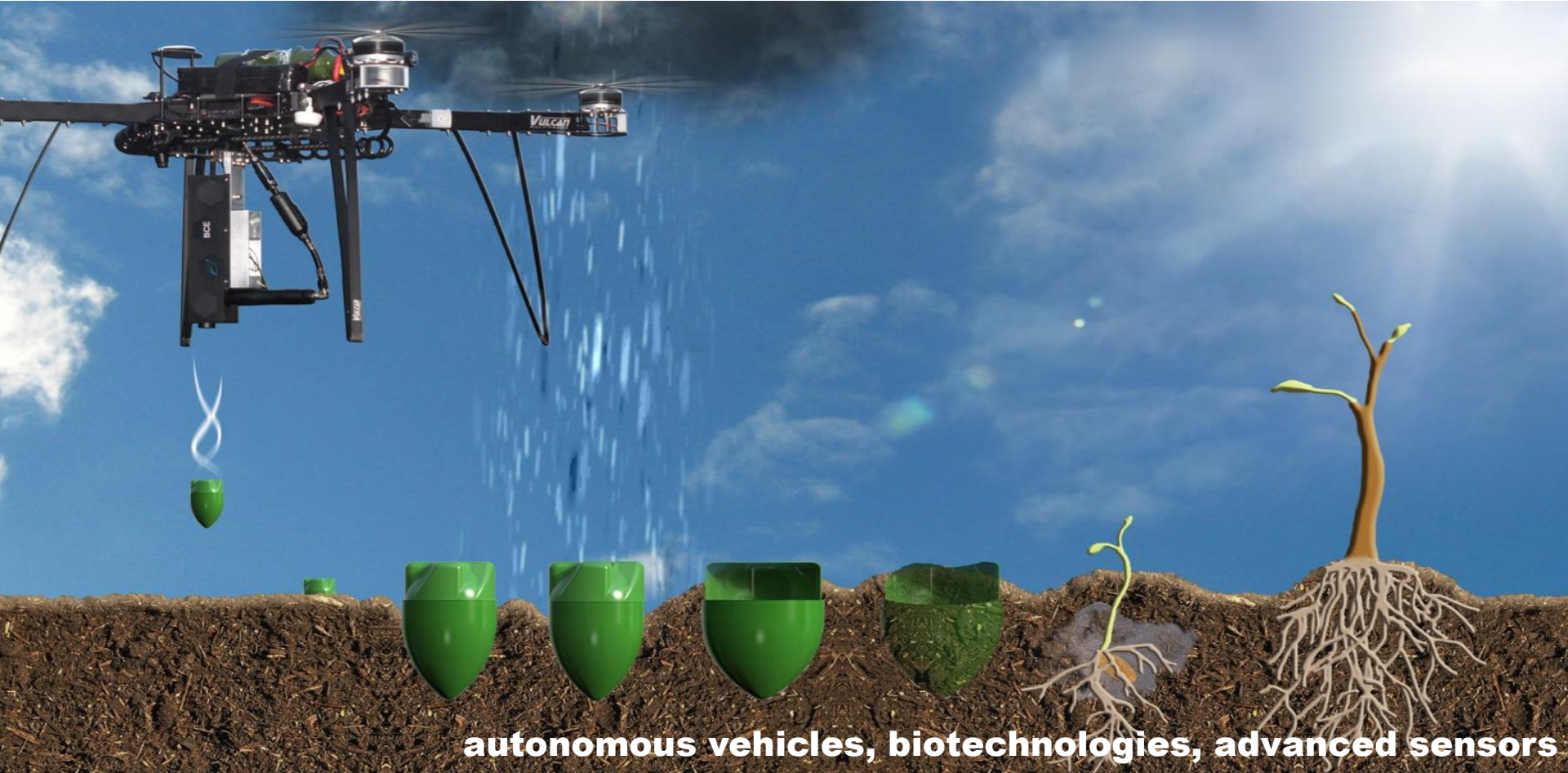
Who gains?

Who loses?

Who are we?



# Ecosystem restoration - land



**autonomous vehicles, biotechnologies, advanced sensors**



# Ecosystem restoration - ocean



**biotechnologies, advanced sensors**



The logo for the World Economic Forum features the text "WORLD ECONOMIC FORUM" in a bold, grey, sans-serif font, arranged in three lines. A blue arc, resembling a stylized globe or a partial circle, is positioned behind the text, starting from the top left and curving around the bottom right.

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ECONOMIC  
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