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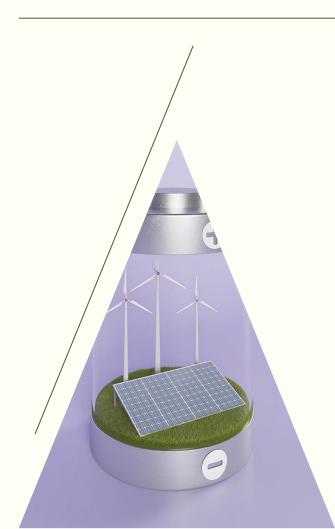
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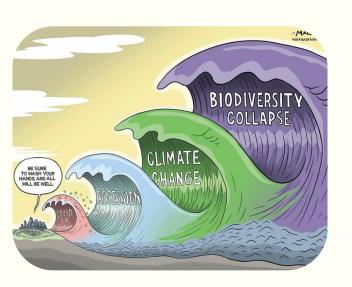
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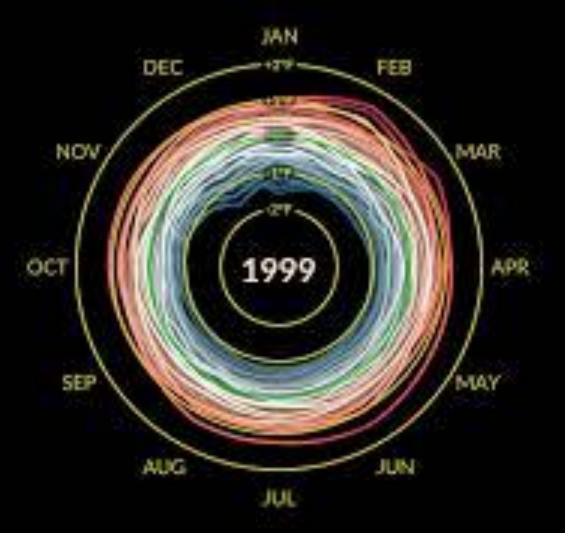


## 01 Enjeux environnementaux

"Qui aurait pu prédire la crise climatique ?"

-Emmanuel Macron, Président des 1%





#### Enjeux environnementaux



Perte de biodiversité



**Pollution** 



**Epuisement des ressources** naturelles



Impact sur les communautés humaines



1,000,000

D'espèces animales/végétales menacées d'extinction



### 1 000 à 10 000 fois plus élevé que le taux naturel d'extinction

Source : L'Union internationale pour la conservation de la nature



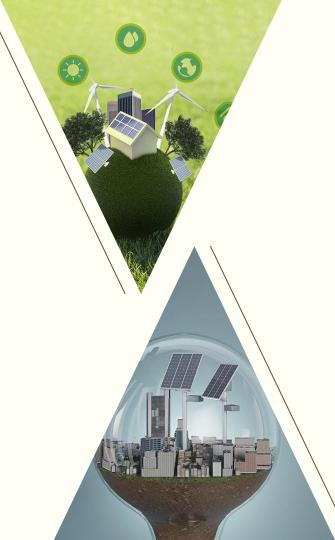
#### Applications de l'IA

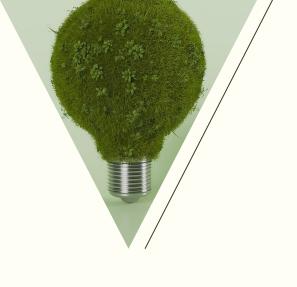
Surveillance de l'environnement

Prévision et adaptation au changement climatique

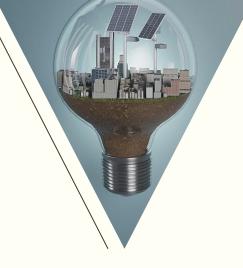
Conservation de la biodiversité

Gestion des déchets et recyclage



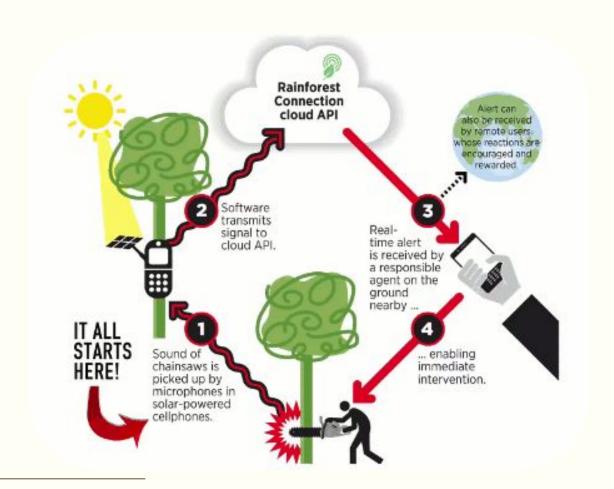


# 03 Exemples concrets



#### **Rainforest Connection**





#### **iNaturalist**



#### **iNaturalist**

iNaturalist engages a community of citizen scientists to collect data that dramatically increases our understanding of wildlife species, their behavior and distributions, and the risks posed to their survival in the future.



#### 3. Microsoft Azure

Observation data is sent to Azure, where all observations are easily shared with scientists and conservationists.



#### 4a. Human powered species identification

Experienced naturalists identify and verify the species in photos. This provides feedback to the observer and serves as training data for computer vision models.



#### 4b. Al powered species identification

iNaturalist uses Al with computer vision models to suggest species instantly from the photo. This provides a useful starting place for the observer, which can then be confirmed by experts.



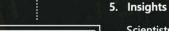
#### 2. Human & smartphone

Citizen scientists use their smartphones to capture photos of the wildlife they encounter.



#### 1. Wildlife species

Animals, plants, and fungi in their natural habitats.



Scientists can use the data to detect changes in timing (phenology), pest invasions, and climate driven range shifts as they happen. This allows conservationists to better protect species at risk.



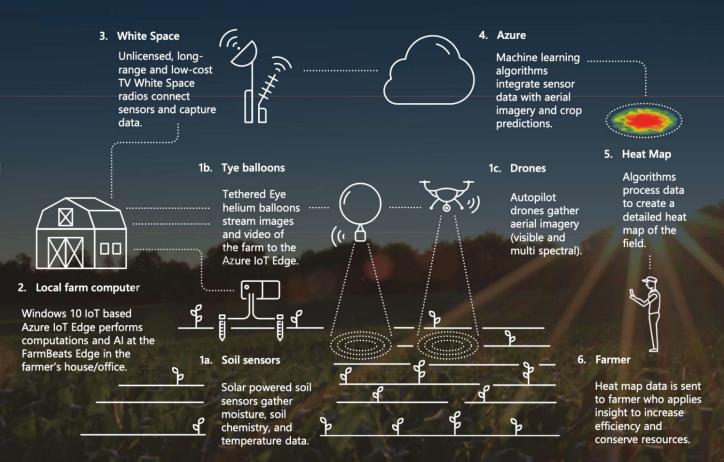


#### Azure Data Manager for Agriculture



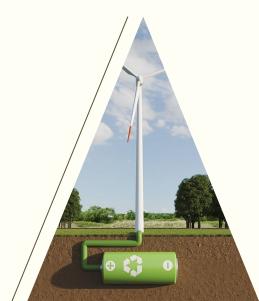
#### **FarmBeats**

FarmBeats provides farmers with access to Microsoft cloud and Al technologies, enabling data driven decisions to help improve agricultural yield, lower overall costs, and reduce the environmental impact of agricultural production.





## 04 Les limites



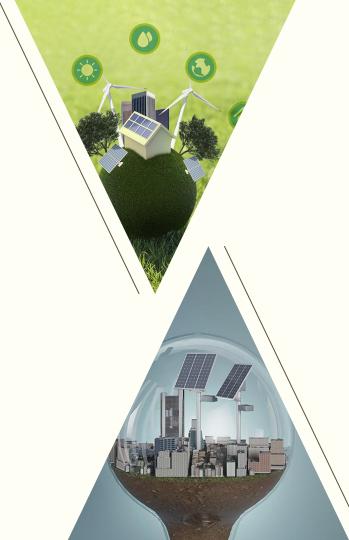
#### Les limites

Accès aux données

Biais algorithmique

Coût financier

Coût énergétique

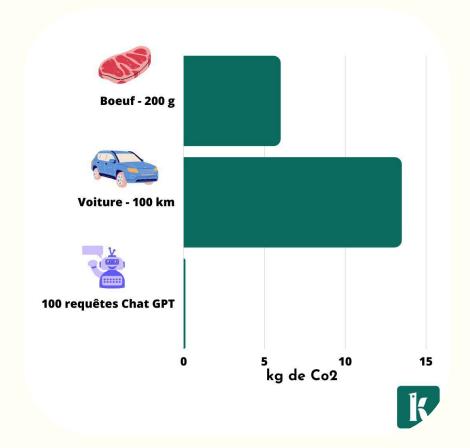




### 10X plus

une requête chatGPT émet par rapport à une recherche Google

Source: https://urlz.fr/pC2b



Source : ADEME

"La nature n'a pas à s'adapter à notre façon de penser. C'est à nous de changer notre façon de penser pour qu'elle s'adapte à la nature."

-Hubert Reeves, Astrophysicien