SODAQ

SNIFFERBIKE

CITIZEN SCIENCE

SODAQ SNIFFERBIKE

SODAQ

- Research and Development
- Hardware Manufacturing
- Data provisioning via LTE-M

Civity

turning raw data into meaningful stories

- Data Platform
- Community Engagement
- Public Dashboard and Application

SNUFFELFIETS

Project 2018 - 2021

- Community Engagement
- Data Analysis

provincie :: Utrecht

- Data Validation and Analysis
- Verifier of particulate matter data quality

Rijksinstituut voor Volksgezondheid en Milieu
Ministerie van Volksgezondheid, Welzijn en Sport

PROJECT

MAKING THE INVISIBLE - VISIBLE

- Over 700 devices in Europe
- Working just when you are cycling
- Approved by the RIVM

https://snuffelfiets.nl/data/

What does the device measure?

- PM10 - coarse dust particles
- PM2.5 - fine particles
- PM1.0 - ultra-fine particles
- GPS location
- Temperature
- Humidity
- Air pressure
- Time
- Voltage
- Volatile Organic Compound (VOC)

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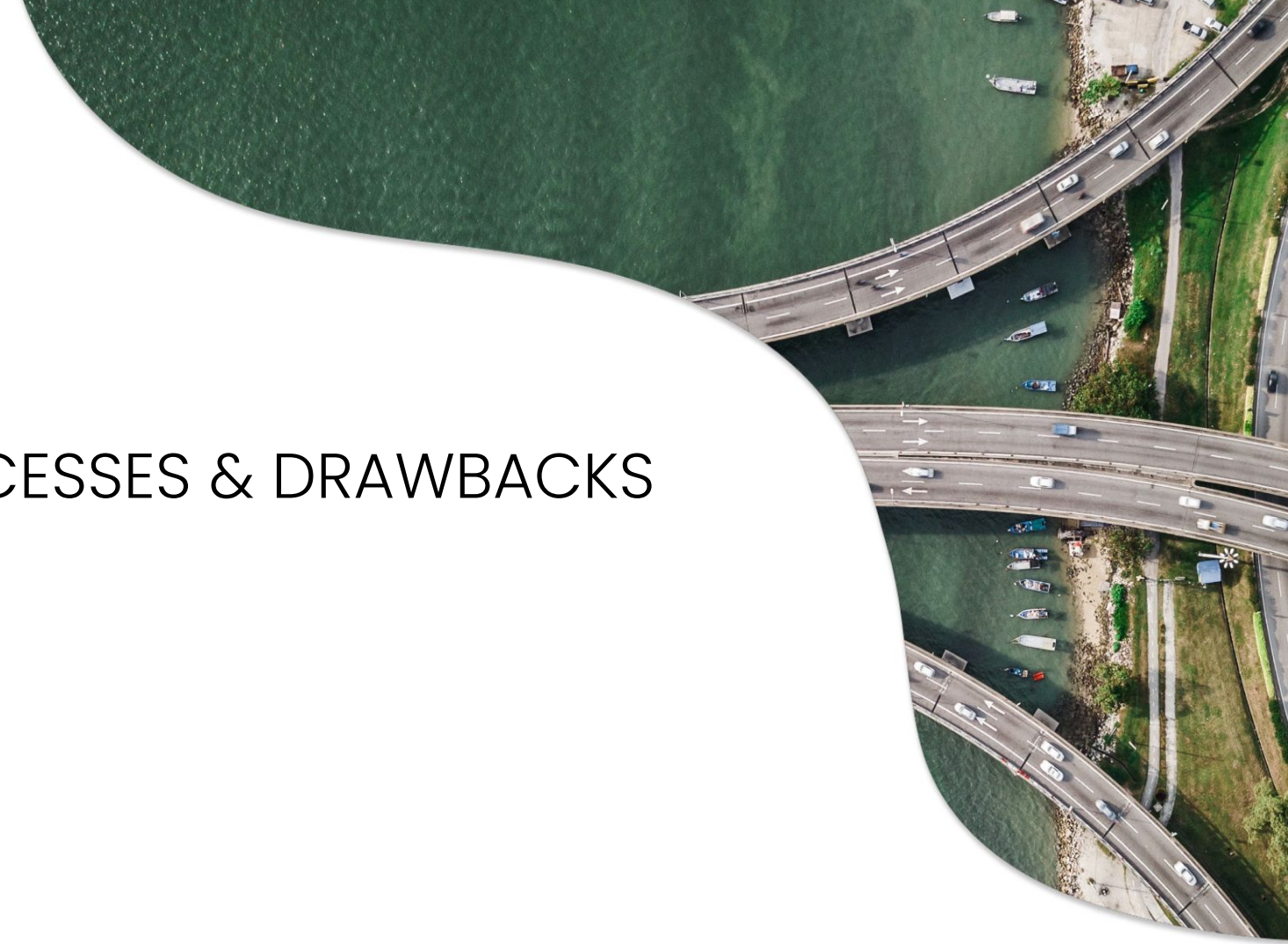
PAST SUCCESSES & DRAWBACKS



SUCCESSES & DRAWBACKS

SUCCESSES

- Publicly available data
- Data validated by RIVM
- Showing data behind rising environmental concern
- Extension of the project from summer 2020 to january 2021
- Strong sense of community
- Dashboard and Mobile app to visualise routes and PM2.5 data

DRAWBACKS

- Decline in cycling less commutes to work
- Device is still quite expensive (€250) could become cheaper with larger production volumes
- Device needs to be charged every 8 hours
- User-friendliness, some users struggled with using the devices

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OPPORTUNITIES & CHALLENGES AHEAD

OPPORTUNITIES & CHALLENGES

OPPORTUNITIES

- More recreative cycling, exploration of unmeasured paths
- International expansion
- Rise in popularity of citizen science
- Collaborating with last mile courier services to gather more data

CHALLENGES

- International network coverage
- Getting data from unexplored paths
- What is the real value of the data? E.g., value per kilometer
- How to make the device more interactive?

THE FUTURE OF THE SNIFFER BIKE

SODAQ AIR

SODAQ AIR

Goal: Increased user-centricity and user experience to lower the threshold to measure air quality with the SODAQ AIR.

MOST NOTICEABLE CHANGES:

1. Smaller casing and sleek design
2. More intuitive mounting
3. LED lights to indicate battery status & PM2.5 data

SODAQ AIR is a collaboration between SODAQ & the TU Delft and will be launched Q1 of 2021

TU Delft SODAQ

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LOW POWER SENSING AND TRACKING