

environment

economy



National Institute for Public Health
and the Environment
Government of the Netherlands

AERIUS

*for the living
environment*

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www.aerius.nl/en
@AERIUSapp



“Different' and 'new' is relatively easy.
Doing something that's genuinely better is very hard”

Jonathan Ive



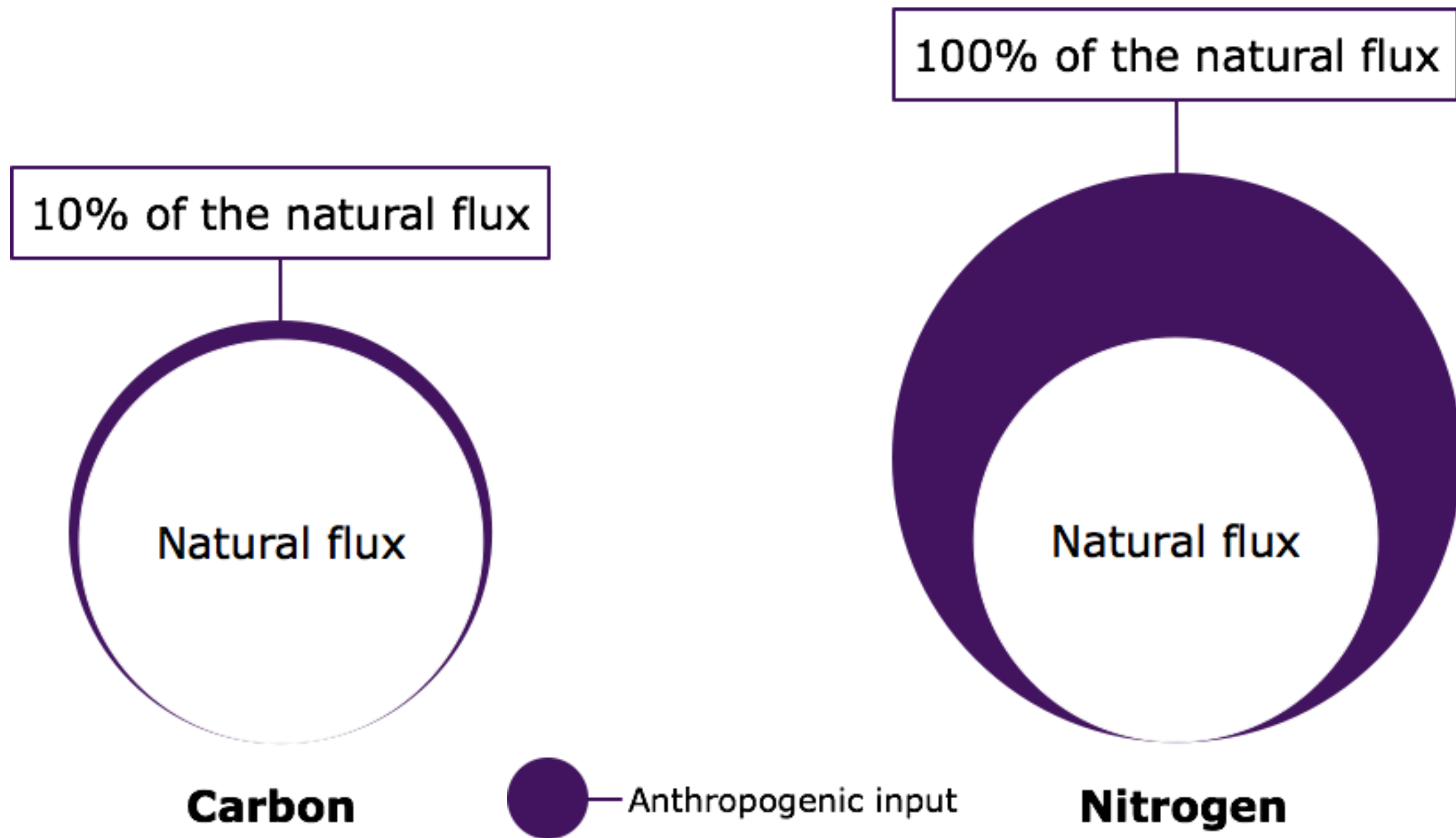
Overview

- Context
- Different and new?
- Genuinely better?
- State of play
- Next Steps





Context: Environmental Challenge

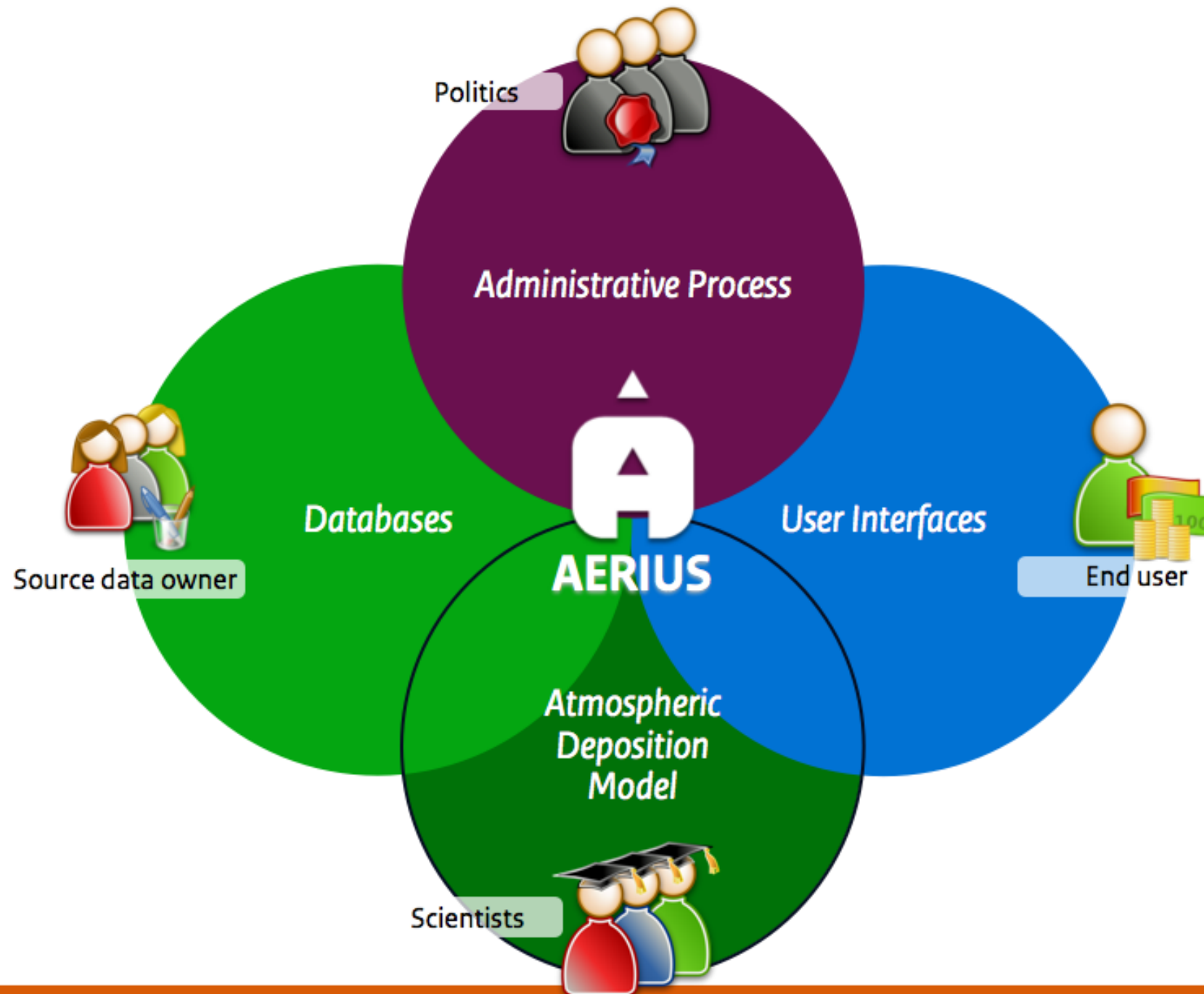


Human alterations to carbon and nitrogen natural fluxes

Fowler et al. (2013) and Prentice et al. (2015)



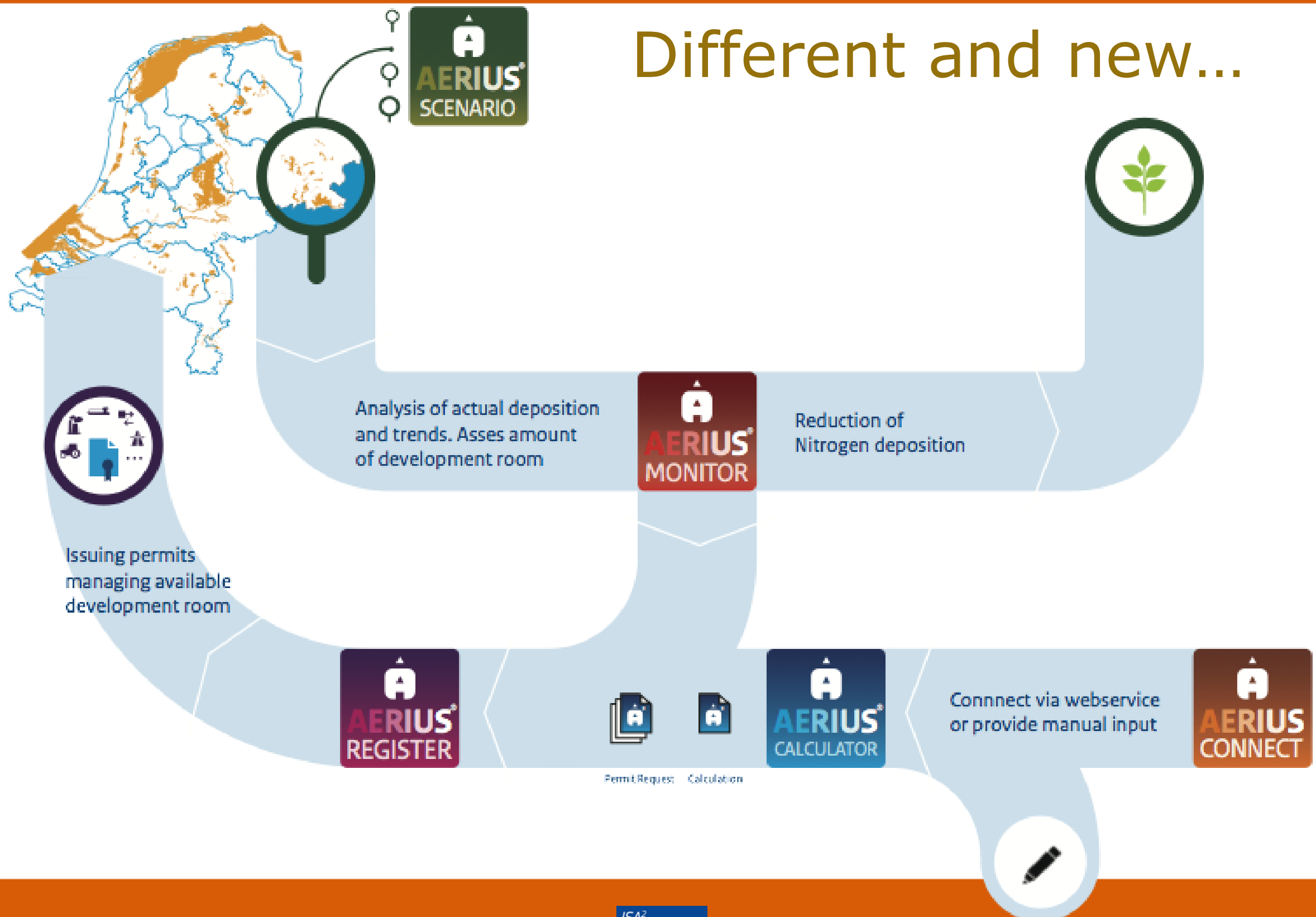
Context: ICT Challenge



- Policy Advisor
- Legislator
- Initiator
- Consultant
- NGO's
- Public



Different and new...





What's genuinely better

▸ Easy accessibility

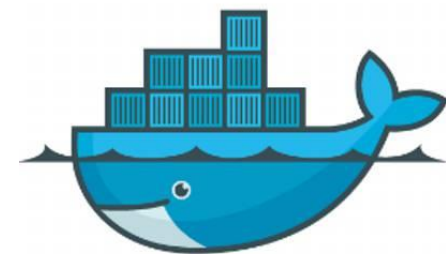
- API for calculation services, Accredited Information, Model, Open Data services, GML validation service

▸ Scalability

- Micro Services Architecture, Docker, AMQP message bus

▸ Reusability

- OGC compliance, Extended GML interoperability, Swagger built API



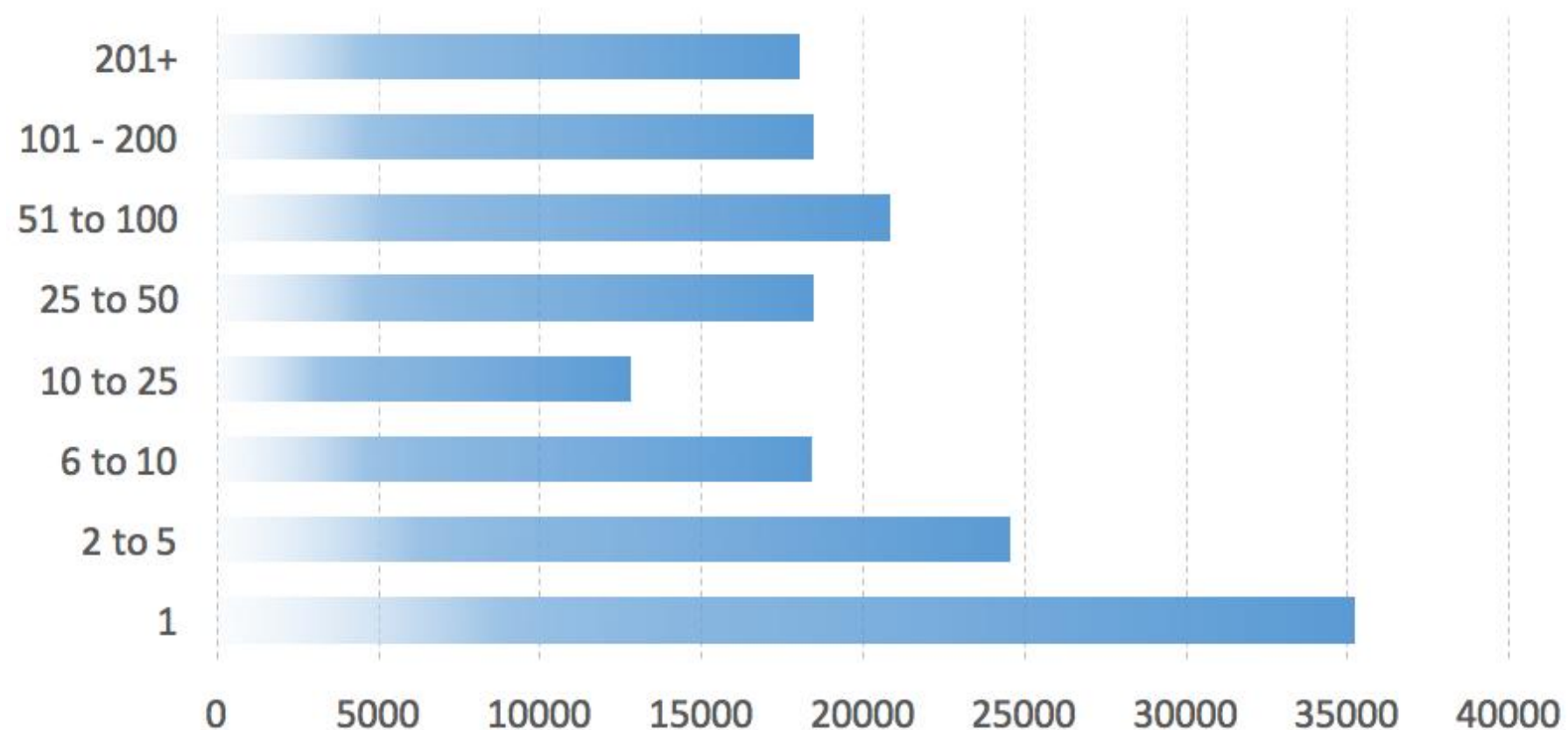
PostgreSQL



ubuntu



State of play, usage



Steady number of approximately 500 user sessions per day



State of play, costs

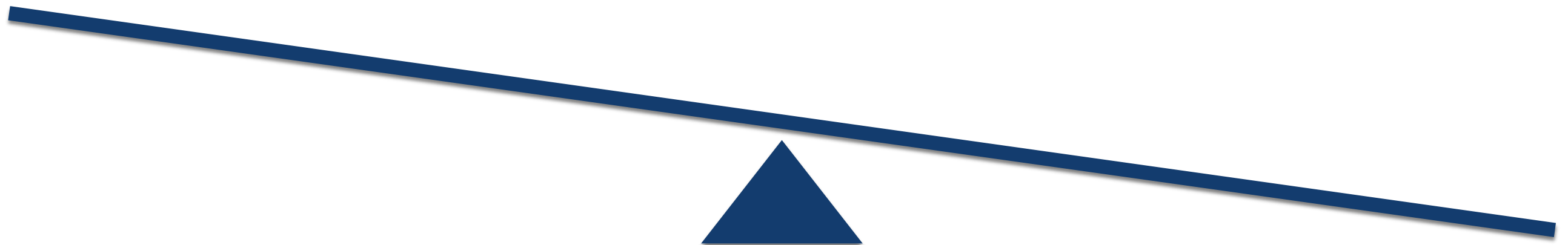
Development costs over 6 years:

€10M

Maintenance cost per year:

€2M

Estimate of public cost savings
last 2 years: **€25M**





Next challenge

Politics: *We have a problem*

Politics: *Our problem is solved*

Politics: *Next issue...*

ICT: *We scrum to help you*

ICT: *Maintenance? Sharing?*



AERIOUS is:

an **Open Source** software instrument specifically developed to **support** an Integrated Approach to Environmental studies for the **evaluation of policy decisions, impact assessments** as well as **regulating permits**.

AERIOUS combines the **complexity** of atmospheric transportation modeling, ecological impact assessments and reporting with the **ease of use** of e.g. posting on Facebook.

AERIOUS products are publicly available and free of charge



<https://gitlab.com/AERIOUS/AERIOUS>