



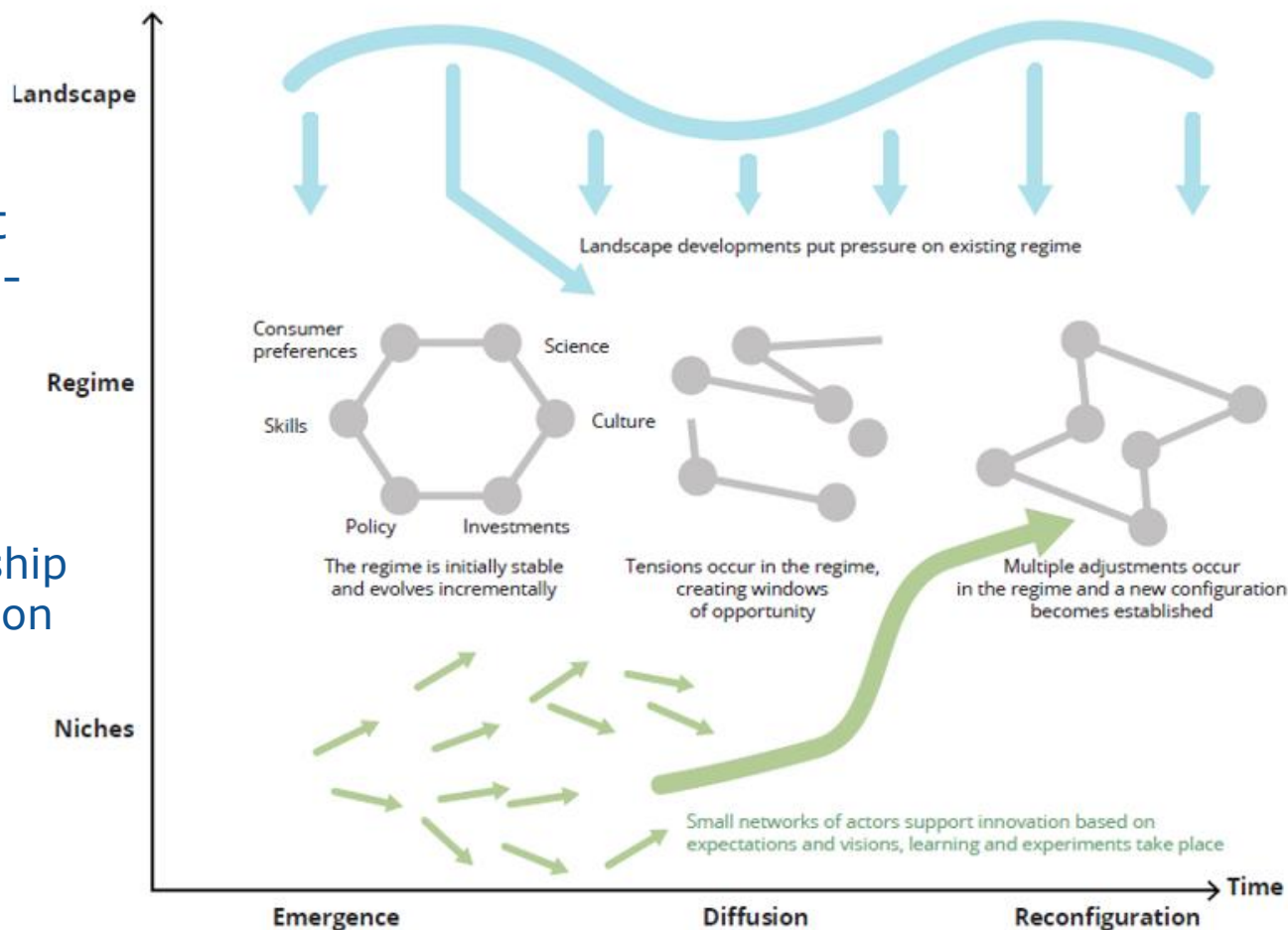
How to make transitions happen? and orchestrating innovation & legislation

Dr. Sven Schade
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The multilevel perspective on sustainability transitions

Natural environment
- legislation -
markets

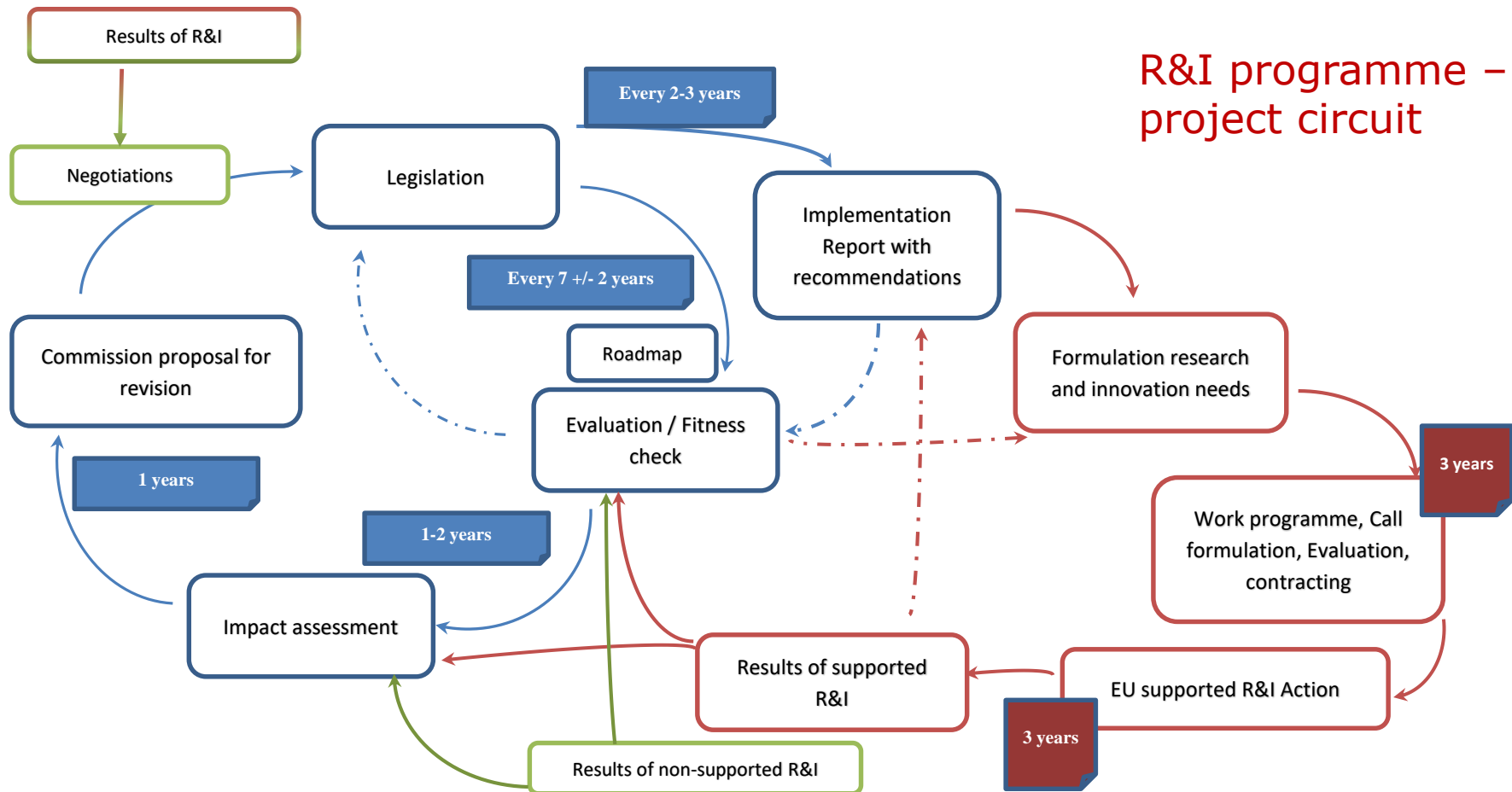
Innovative
entrepreneurship
& administration



Source: Based on Geels, 2006.

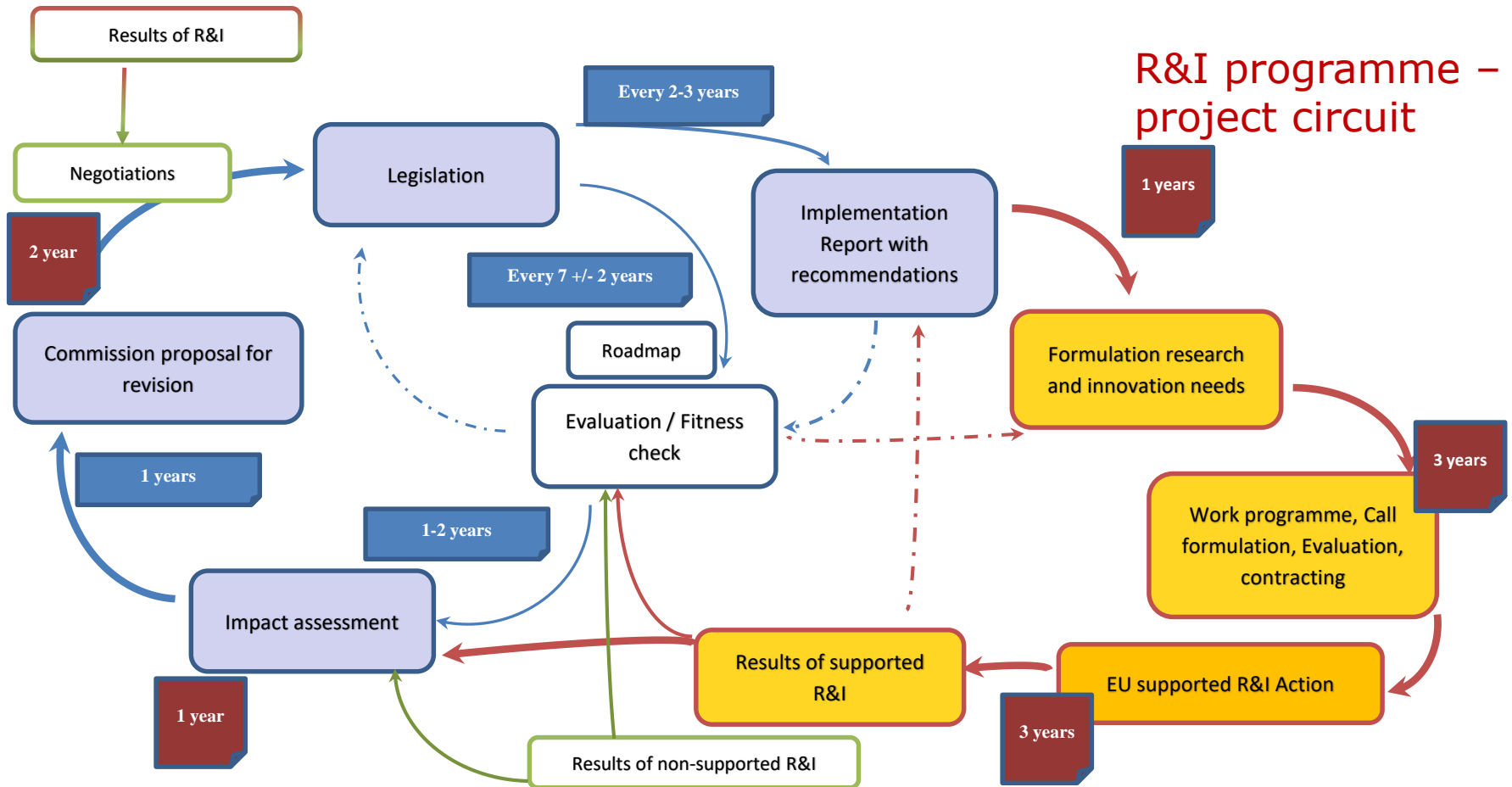
Source: European Environmental Agency (2019): Sustainability transitions: Policy and practice

When can research have influence on revision of legislation?



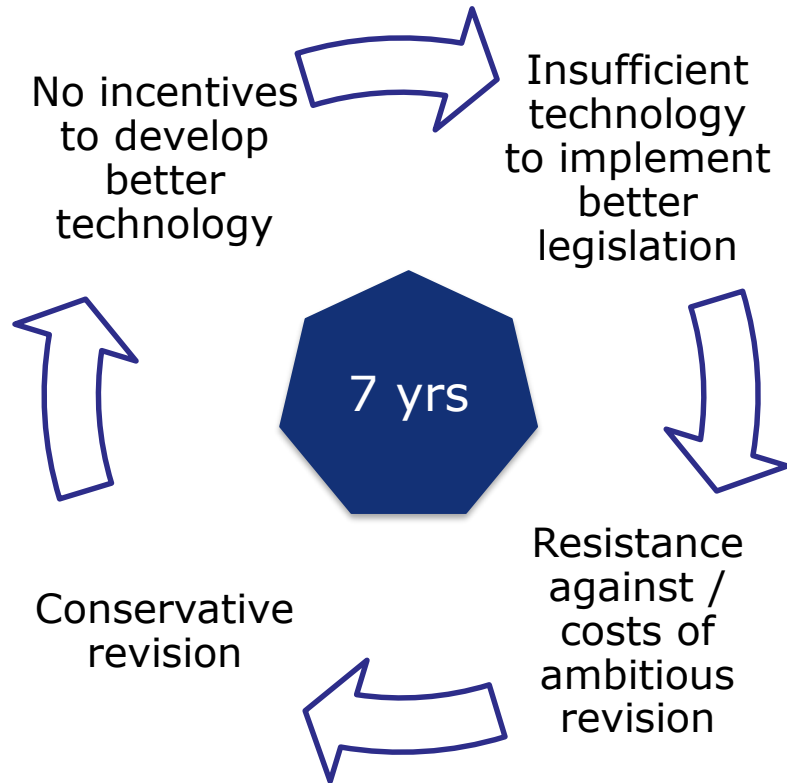
Legislation's revision circuit

The fastest track for planned action – 10years



Legislation's revision circuit

Breaking the „legislative lock-in“ – Toxic chemicals monitoring in water



1. 50 out of +1000 toxic chemicals with potential to cause catastrophic harm are monitored (list in legislation) measuring concentrations.
2. Measuring 1000 is not economic nor scientifically sound
3. Science: Measure impacts (on advanced biosensors) not concentrations!
4. Technology is not developed as high resistance is anticipated
5. ERC grant: Measuring toxins impact on molecular level gives ‚cosmetics‘ as likely application

2020 revision of Water Framework Directive would have to state that monitoring will be changed in 2030 should a technology become available.

+ A Horizon ‚prize‘ to attract the relevant research

Mobilising science and policy for transition – make better use of powerful instruments

Timing matters – knowledge mobilisation

Well thought out, well timed Prizes

Experimenting solutions and governance

Location specific & social innovation

Breaking down perceived legal barriers

Innovation Deals