Reducing CECs water pollution from Scottish consumer products: what socio-legal solutions? Scottish Covernment

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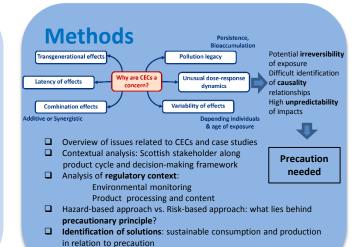
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Introduction

Contaminants of Emerging Concern (CECs) form a class of contaminants present in numerous consumer products for which scientists and public awareness is raising. Indeed, while their number is nearly uncontrollably increasing, little knowledge is available on their fate into the environment as well as their potential impact on public health. A more comprehensive approach is now needed to reduce their use at source and develop safer sustainable production and consumption modes, beyond classical case-by-case approach of chemical regulation and "end of the pipe" water treatment.

This research project investigates social and legal precautionary options to tackle with the challenge raised by CECs, with a focus on **Scottish** market for Personal Care and Household Products (PCHP) in order to improve availability of "safer" products and assess feasibility of potential legal improvements. The final result will be in the form of recommendations for regulation and policy, such as identifying which legal approaches are worth being developed, which good practices should be fostered in industrial sectors, and what kind of public messages can be emphasized.



Assessing feasibility of solutions identified: social investigation (see

Results

Based past case studies, such as **chemicals in mass consumption products** (e.g. CFCs in aerosols and ozone depletion, PCBs in electrical components) now recognised as sources of diffused pollution, adequate precautionary actions have been identified (see bottom right diagram for further details):

- Increased knowledge production and evidence proofing with a better integration of real world conditions (e.g. long term accumulation, mixing of chemicals in the environment); monitoring of suspicious chemicals, tracking of product content;
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 Diversification of technologies in order to avoid monopoly and ease technology changes when needed (substitute substances, alternative products, alternatives usages such as product format, frequency of use);
- Early action based on reasonable grounds to avoid "paralysis by analysis";
- Diversification of sources and opinions to ensure comprehensiveness, adequacy and acceptance of measures;
- **Better communication and understanding** between research groups and institutions.

Future

Feasibility and effectiveness of solutions envisaged will be refined and challenged in the form of interviews of key stakeholders and group workshops with participants from:

- Industrial sector: manufacturers, professional organisations (e.g. IChemE, RSC);
- Regulators and decision-makers: policy-makers, institution: (e.g. Scottish Government, Scottish Parliament staff and MSPs SEPA):
- ☐ Consumer organisations: Citizen Advice Scotland.
 Additionally, a series of focus groups and a large perception questionnaire will explore consumer awareness and level of agency.

