

Protect lives with sustainable development

We need brave politicians so that people can live on.
The globe can exist even without the people!

I have joined the Rebel Mothers to show the fantastic possibilities to cope with the transition to a fair knowledge-based sustainable society. The basis is practical experience as well as my and others' research results.

The text is a result of what my teenage self, wanted to give to the world. There was a lot of talk about starvation, and as the daughter of a farmer, I thought that if we learn more about how plant nutrients should be best managed, no one will have to starve.

My 80-year-old self has for at least three decades told how a more sustainable management of both plant nutrients and bioenergy can be obtained to avoid famine. The curious can consider a March 2023 updated drawing from 1992 found at <https://biotransform.eu/wp-content/uploads/2023/03/The-SBRS-concept-is-presented-by-BAS-konsult-AB-according-to-the-NABC-model-supplement-20230314-1.pdf>

The rebellious mothers appeal to decision makers

For the future of all children, it is necessary to decide via laws that by 2030 at the latest, all methods that cause health-hazardous emissions must undergo a sustainable transition.
We want to live sustainably now.

Fundamental to human life are clean air, clean water, and nutritious food.

It is unsustainable that today's agricultural system uses mineral fertilizers and pesticides that are costly to produce, pollute the environment and damage biodiversity.

At the same time, it is known that organic farms can do without artificial chemicals but lack sufficient natural fertilizers because recirculation does not work.

Therefore, conversion of today's centralized, costly, energy-intensive and polluting systems of waste and sewage to transparent local systems of biological transformation is essential.

The Ellen MacArthur Foundation presented in 2019 that less than 2 percent of plant nutrients, which come from the country to the cities, are returned to cultivated lands.

Residents pay high waste and sewer fees for the 98 percent who cause air, water, and land pollution with current energy-wasting practices.

All Renewable Organic Material originates in photosynthesis and contains the same elements as the human body. These elements must be returned sustainably to cultivation systems to maintain and increase soil fertility, restore degraded soils, and phase out man-made chemicals that harm soil microorganisms.

What will the transition look like?

Local systems are built in each village and in each district in collaboration between different businesses. It will save energy and transport and minimize emissions to air, water, and soil.

Bioenergy and the vital elements from organic residues and waste, including food and toilet waste, are collected hygienically without polluting air and water. In local high-tech biogas plants, nitrogenous and aqueous materials are mixed with drier carbonaceous materials from green areas, agriculture and forestry and converted using biological methods into biogas and biofertilizer. New types of biogas plants are being developed where precision that excludes

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emissions is sought.

Unsustainable combustion, thermal gasification and pyrolysis of Renewable Organic Material are being phased out. These methods kill microorganisms and harm all living things.

The biogas' energy is converted locally with trigeneration into electricity, heat, and cooling (<https://www.tedom.com/en/trigeneration-principles/>).

Biofertilizers are used for all cultivated crops and replace man-made chemicals.

Gray water without black water is biologically purified in local facilities and used for irrigation, fountains, water games, etc.

Municipal politicians are responsible for building sustainable local systems for waste and sewage. Continued investment in current unsustainable methods slows down or makes the transition impossible and increases future pollution and costs. In all decisions, decision-makers must present life-cycle analysis, risk and impact analysis and cost-benefit analysis to residents, i.e. cost-effectiveness analysis with health index effect. Material and energy flow must be reported.

Unsustainable systems, which have been causing emissions for decades, are very costly and dangerous for the environment, health, and climate. Materials originating in photosynthesis make up approximately 70% by weight of household waste according to the report "Reforsk; R&D 145, 1998". Therefore, biologically sustainable transformation is important. For other materials such as glass, plastic, metals and environmentally hazardous chemicals, there are already suitable methods.

All residents can closely follow the processes in local facilities and contribute to continuous improvements. Social cohesion increases and thus everyone is equipped for various stresses and crises.

Positive effects of the transition to local biological conversion:

- Cleaner air and water, cheaper nutritious food, cheaper charges for electricity, water, and waste.
- Most of the 17 sustainability goals can be reached by 2030.
- The nine processes that regulate the stability and resilience of the Earth system, presented in the concept of planetary boundaries (<https://www.stockholmresilience.org/research/research-news/2023-09-13-all-planetary-boundaries-mapped-out-for-the-first-time-six-of-nine-crossed.html> & <https://eatforum.org/eat-lancet-commission/>), have been exceeded most for two plant nutrients nitrogen and phosphorus and for biodiversity. By switching to sustainable methods, when bioconversion is used, the risk of environmental change is significantly reduced, and the balance is restored over time.
- Production of new equipment for many local sustainable facilities creates many jobs and increases the hope of creating a fair knowledge-based sustainable society.

It is possible to quickly make everything better both for the current generation and for all future ones. More information on www.biotransform.eu.

MOTHERS* REBELLION in Sweden

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The picture from 2017.

Current laws allow costly energy- and chemical-intensive methods of handling waste and sewage that pollute air, water, and land.

There are opportunities to use technology adapted to biological conversion methods in local systems to ensure a development that minimizes emissions and thus negative impact on health, environment, and climate.