

# Making governance better for fair and sustainable consumption



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## Abstract

The past 50 years have seen the birth of many environmental policies, and yet, despite some progress, the ecological integrity of the planet remains threatened. Resource-intensive lifestyles, and the difficulties in decoupling increased consumption from resource use and greenhouse gas emissions at the scale needed, seem to be the main causes of our crisis.

Furthermore, the current distribution of Earth's resources is very unequal, both between countries, but also within countries. The basic needs of too many people are not met. In order to reach the targets of the Paris Agreement, safeguard ecological limits, and reach sustainable development, we must address the consumption challenge.

## BACKGROUND PAPER

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## Key messages

- Monitor consumption-based emissions;
- Work towards more fair and inclusive consumption patterns and support strong sustainable consumption governance;
- Develop more comprehensive policy packages for sustainable consumption;
- Support policy experiments that can increase public support for new policies;
- Analyse the potential for introducing sufficiency policies.

*“There are generally three ways of reducing emissions – apart from the most obvious, to replace current fossil energy with renewables, such as solar and wind. ... Number one is technical solutions.... The second alternative is to use nature’s own ability to absorb and store carbon.... The third option is the only method that is available at scale already today. And that is to simply stop doing certain things. But it is also the alternative which people seem to find the most unrealistic. Just the thought of us being in a crisis that we cannot buy, build or invest our way out of seems to create some kind of collective mental short circuit.”*

Greta Thunberg, translation of a speech from Swedish public radio, Sveriges Radio, published in Time



## Introduction

The birth of modern environmental policymaking arguably occurred in the 1960s and 1970s, with the introduction of the first modern environmental laws, such as the US Clean Air Act and several countries adopting national bans of dangerous substances such as DDT. Over the subsequent 50 years, further progress has been made in environmental policymaking. For example, industrial pollution has been cut in many countries due to new technologies and fuel standards, waste management has improved, and environmental taxes and carbon markets have been introduced. However, these policies have not been introduced everywhere, and the adopted policies have not been able to stop climate change or continued ecological deterioration (Steffen et al., 2015; Folke et al., 2020; IPCC, 2021), but merely mitigated the problems.

So far, “we have won a few battles but are losing the war”, as the saying goes, since, on a global level, we are not on track to reach the targets of the Paris Agreement (IPCC, 2021) or to halt biodiversity loss (IPBES, 2019). Looking deeper at past successful policies, many of them have mainly targeted industrial pollution (e.g. Dalhammar, 2019). But there are also examples of consumption-based policies, for example taxes on fossil fuels and bans on incandescent light bulbs. Their effects have been modest, and there is a need for more progressive demand-side policy interventions (Isenhour and Feng, 2016).

We are at the stage where we need to engage with the consumption challenge. The ability to make changes in current lifestyles, especially in societies with high consumption levels, will determine whether we avoid the grimmest consequences of climate change (Akenji et al., 2021). In order to reach greenhouse gas emission levels that are in line with the Paris Agreement, technological development is most likely not enough: changes in consumption patterns are also needed (Akenji et al., 2021; Fauré et al., 2019a; Gore et al., 2020a; Larsson et al., 2022).

Of special relevance here are the consumption-based emissions of the wealthiest individuals. The emissions of the richest 1% of the global population account for more than twice the combined share of the poorest 50% (UNEP, 2020). The emissions from the poorest 50% of the EU population fell by an estimated 24% between 1990–2015, while the carbon emissions from the most affluent 10% of EU citizens grew by 3% (Gore et al., 2020b). A concern is that the remaining carbon budget – i.e. the remaining future carbon emissions available in order to meet the Paris targets – will mainly be used by the part of the world’s population that already enjoy a high level of welfare if current trends continue are not changed (Karthä et al., 2020).

Current trends further indicate that the richest 1% may significantly increase their per capita consumption emissions until 2030 (Gore, 2021). Reaching the Paris targets is probably impossible without tackling emissions from the rich (Newell et al., 2021), as they are the ones mainly involved in “overconsumption”, such as flying frequently, fuelling large yachts, heating and cooling multiple large homes and driving large cars. A recent study found that the percentage of the most frequent fliers – less than 1% of the world population – likely accounted for more than half of the total emissions from passenger air travel in 2018 (Gössling & Humpe, 2020). Interestingly, other studies indicate that many leisure flights are not very important for frequent flyers (Gössling et al., 2019).

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Current trends also indicate a “displacement” of impacts. The global economic system relies on long supply chains, and production is fragmented across companies as well as across geographical space. Thus, products and services that are consumed in one country will cause environmental impacts in many other countries (Peters & Hertwich, 2009; Peters et al., 2011; Tukker et al., 2016, Isenhour & Feng, 2016).

A country’s emissions of greenhouse gases can be measured in different ways, and a distinction is often made between (Tukker et al., 2020):

- **territorial emissions**, where emissions within the geographical boundaries of the country are included, and
- **consumption-based emissions** where emissions caused by the consumption within the country are included, irrespective of where they occur in the world.

Typically, high-income countries have larger consumption-based emissions than territorial emissions (Peters & Hertwich, 2008; Ivanova et al., 2016). As an example, the Nordic countries generally receive a high ranking in various sustainability indexes (e.g. Sachs et al., 2021). But if we look at Sustainable Development Goal (SDG) 12, “Responsible consumption and production”, they are not performing very well when consumption-based environmental impacts are considered. Sweden is an example of this, as a majority of most types of environmental impacts from Swedish consumption occur abroad (Fauré et al., 2019b; Persson et al., 2019; see also Schmidt et al., 2019). This includes emissions of greenhouse gases, other air pollutants, use and emissions of hazardous chemicals, and use of materials and water. One exception is land use, where forestry products, construction materials and food products are the product groups, which use the largest amounts of land for Swedish consumption (Fauré et al., 2019b). “Hotspots” for non-domestic emissions include construction materials, food products, wholesale and retail services, motor vehicles, and machinery and equipment. Many of these impacts take place in Asian countries as well as within the EU (Fauré et al., 2019b).

Although the environmental impacts from Swedish consumption often occur outside Swedish borders, the majority of the “value added” takes place within Swedish borders (Persson et al., 2019). Both Swedish territorial and consumption-based greenhouse gas emissions have been decoupled from economic growth and have shown a decline since 2008, the first year available for consumption-based emission statistics (Palm et al., 2019; Swedish EPA, 2022). Although Swedish territorial emissions have decreased faster than consumption-based emissions, the reduction is not at a pace required by the Paris Agreement (c.f. Anderson et al., 2020).

A study of impacts of consumption in Finland showed similar tendencies: some decoupling is taking place domestically, due to development of low-carbon technologies and a shift in the consumption mix towards consumer goods/services with lower emissions. But these technological and structural changes have been counteracted by growing consumption expenditures, and more and more of the Finnish consumption-based emissions occur outside the country (Nissinen & Savolainen, 2019).

Current trends around the world are clearly unsustainable. On a global level, emissions of greenhouse gases are not decreasing at any significant pace (for recent trends, see IEA, 2021); biodiversity and ecosystem functions and services are deteriorating worldwide (IPBES, 2019); and for many of the SDGs, progress has been halted or reversed because of the global pandemic (UN, 2021). In this report





we argue that governments must start addressing consumption-based emissions and consumption patterns.

In the following sections, we discuss the challenges related to decoupling and rebound effects (these concepts are explained below), and why the existing research shows that it will be hard to reach climate and biodiversity goals by relying only on new technologies and greater efficiencies. These are the main current strategies applied to support new consumption patterns under the current policy approach, often referred to as “green growth”. This is followed by a discussion on why current consumption patterns are unfair from a distributional perspective.

We then examine some avenues for future policymaking: 1) measure consumption-based impacts; 2) work towards more fair and inclusive consumption patterns, and support strong sustainable consumption governance; 3) develop more comprehensive policy packages for sustainable consumption, 4) perform policy experiments, and 5) analyze the potential for introducing so-called sufficiency policies.

## Green growth, decoupling and rebound effects

“Green growth” has become a dominant political response to increasingly dire warnings about climate change and ecological breakdown (Dale et al., 2016). Most national governments, the EU, and several international organizations, such as the OECD, UNEP and the World Bank, advocate for green growth, though they are using different languages, definitions and approaches (Jänicke, 2012; Hickel & Kallis, 2020). Exactly what green growth is can be hard to define, but its essence is that – at least in theory – continued economic expansion (as measured by Gross Domestic Product, GDP) is compatible with, or can be made compatible with, our planet’s ecology (Hickel & Kallis, 2020). If at all possible, such developments require groundbreaking technological advancements. A UNEP document from 2011 spells out the challenge:

*“The central challenge... is to decouple growth absolutely from material and energy intensity”*

(UNEP, 2011, p. 15).

The term decoupling refers to breaking the link between “environmental bads” and “economic goods”. When GDP growth coincides with absolute reductions in emissions or resource use, it is denoted as **absolute decoupling**. **Relative decoupling** describes a situation where environmental impacts are still increasing, but where the increase is less than the simultaneous increase in GDP growth. In our current situation, relative decoupling is not enough: we need absolute decoupling. Furthermore, the absolute decoupling needs to be large enough to reach emission reductions in line with the Paris Agreement (cf. Anderson et al., 2020).

In a recent literature review, Haberl et al. (2020) reported that the decoupling rates that are observed in some countries are far from the large and rapid absolute reductions of resource use and greenhouse gas emissions that are needed. They concluded that decoupling needs to be complemented by sufficiency-oriented



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strategies. Hickel and Kallis (2020) also found that empirical projections show no absolute decoupling at a global scale, even under highly optimistic conditions. They therefore questioned the wisdom of green growth as a viable sustainability strategy. Parrique et al. (2019) came to similar conclusions (p. 4):

*[N]ot only is there no empirical evidence supporting the existence of a decoupling of economic growth from environmental pressures on anywhere near the scale needed to deal with environmental breakdown, but also, and perhaps more importantly, such decoupling appears unlikely to happen in the future.*

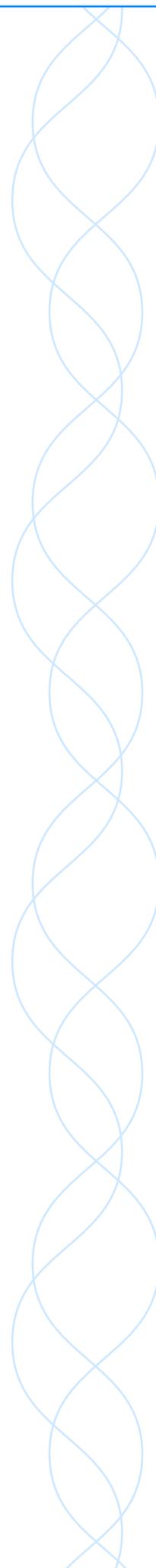
They also provided some explanations for the lack of absolute decoupling and why environmental impacts often do not decrease on the level expected (Parrique et al., 2019). Examples include:

- **Rebound and other indirect effects.** Efficiency improvements are often partly or totally compensated by a reallocation of saved resources and money (Zink & Geyer, 2017) to either more of the same consumption or by increasing other types of consumption. For example, using a fuel-efficient car more regularly is often referred to as a direct rebound effect, and other high-impact acts of consumption, such as buying flight tickets with the money saved from buying a fuel-efficient car, an indirect rebound effect.

Rebound and other indirect effects can also generate structural changes in the economy that induce changed consumption. For example, more fuel-efficient cars reinforce a car-based transport system at the expense of greener alternatives, such as public transport and cycling.

In parallel to economic rebound effects, time and space rebound effects can occur. For example, if efficiency improvements save time, this “saved time” may be used in different ways that can have environmental impacts. Other types of indirect effects also can cause both positive and negative impacts; for example, induction occurs when the use of an application or product stimulates increased use of other products or services that may have beneficial or destructive environmental impacts (c.f. Börjesson Rivera et al., 2014).

- **Problem shifting.** Technological solutions to one environmental problem can create new ones or exacerbate others. For example, the production of private electric vehicles puts pressure on resources such as lithium, copper and cobalt (e.g. Xu et al., 2020); the production of biofuel raises concerns about land use such as deforestation (e.g. ECOFYS et al., 2015); and while nuclear power generation is often considered “clean and renewable”, it produces nuclear risks and logistic concerns regarding nuclear waste disposal (e.g. Feiveson et al., 2011). Even if the total environmental impacts often are lower with new technological solutions, they are not eliminated and may take new forms (Luderer et al., 2019).
- **Limited potential of recycling.** In general, recycling saves energy and resources and leads to decreased environmental impacts (e.g. WRAP, 2010). But recycling rates are currently low and recycling processes generally still require energy and virgin raw materials. Most importantly, recycling is limited in its ability to provide resources for an expanding material economy. total environmental impacts often are lower with new technological solutions, they are not eliminated and may take new forms (Luderer et al., 2019).
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The literature contains few or limited examples where increased economic growth measured as increased GDP has been compatible with decreased emissions on the scale necessary for the Paris Agreement. On the other hand, there are also no or limited examples where “no-growth” or “degrowth” economies have been compatible with sustainable development. Changing society to a sustainable path implies an unprecedented challenge that will require new solutions.

The concept of “agrowth”, which can be understood as being agnostic and indifferent to GDP growth, is proposed as an alternative to unconditional anti- and pro-growth strategies (see e.g. van den Bergh, 2018). There is increasing consensus that GDP is a rather imperfect indicator for measuring human welfare. As noted by van den Bergh (2018):

*The literature on growth-versus-climate shows that theoretical and empirical support for both green growth and anti-growth is weak. Both strategies are risky and do not provide sufficient guarantee for managing climate change or other sustainability challenges.*

Thus, an “agrowth” mindset, focusing on policies promoting sustainability and enhancing human welfare, rather than an unproductive focus or debate on the policies’ implications for economic growth, could depolarise the growth debate and increase popular support for sustainability policies.

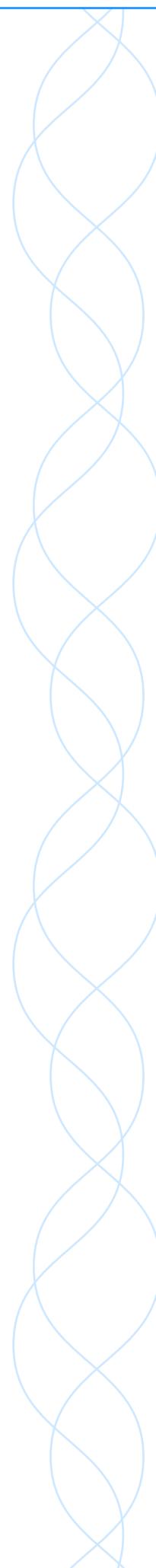
## A fair “consumption space”

The world is thus facing a double consumption-related challenge: Rich people in both developed and developing countries need to change consumption patterns towards less resource-intensive and carbon-intensive lifestyles, while basic needs are currently not met for many poor people (Raworth, 2018).

The unequal distribution of resources within countries and between countries must be brought up as part of the discussion on how to divide our remaining carbon budget and the (future) access to resources. The challenge is further complicated by the fact that the growth of developing nations should not exceed the capacity of the planet, creating a dependence on green development or green technologies.

The pandemic may worsen current inequalities; it has already led to increasing poverty and widening inequality in several countries and regions (Sanchez-Paramo et al., 2021). While extreme events like pandemics can catalyse social change (e.g. Cohen, 2020), businesses and banks are already promoting a return to “normal”. Policymakers need to ensure that the pandemic and recovery packages contribute to a sustainable consumption transition and do not widen economic inequalities. The “old normal” has not been equitable and sustainable – nor does it take into account the future.

Ultimately, ecological limits must be respected (UNEP, 2021). When the carrying capacity of ecological systems is transgressed, the resources and ecosystem services that future generations can enjoy will be limited – locally, regionally, nationally and globally. The actions of contemporary generations are therefore limiting the possibilities of



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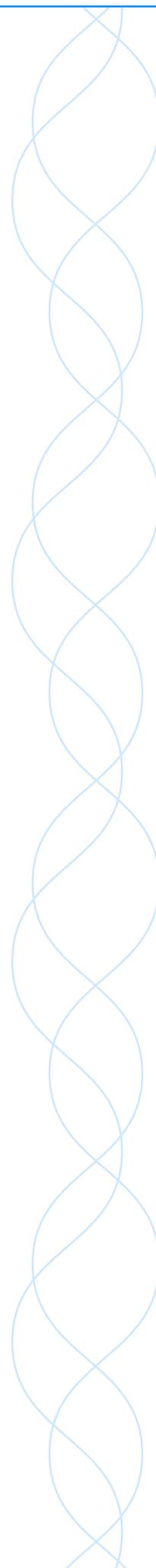
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future generations to consume. The case could then also be made that societies should prepare for future scenarios with less economic growth, as such a future may happen whether we intentionally adopt that goal or not (see also the discussion from Svenfelt et al., 2019). Various triggers, such as pandemics or extreme weather events that lead to supply bottlenecks and resource scarcity, may also cause changes to the current global economic system.

Scenario research indicates that only scenarios that combine technology development with more substantial behavioural changes can ensure that the targets of the Paris Agreement are met (e.g. Akenji et al., 2021; Fauré et al., 2019a; Hertweck et al., 2021; Larsson et al., 2022; see Figure 1). Forecasted efficiency improvements will not be enough to reach climate targets (Bjørn et al., 2018).

A narrow anthropocentric focus, where nature is perceived as a service or resource, neglects that the well-being of humans is dependent on nature and the services provided. One potential way forward is to reconcile ecological limits with social aspirations: a safe space for humanity is where all people can consume enough goods and services to live a decent life without exceeding ecological limits; for instance, in accordance with the idea of Doughnut economics proposed by Raworth (2018), among other concepts proposed in the academic literature, such as Consumption Corridors (cf. Fuchs et al., 2021). The SDGs can also be seen as expressions of a will to create a space that should be built by development.

A decent life for everyone while staying within ecological limits requires changes of consumption patterns that threaten or are beyond those limits. The low-hanging fruit is to alter consumption patterns of rich people in developed and developing countries. Strategies to achieve this can include choosing or changing products and services with



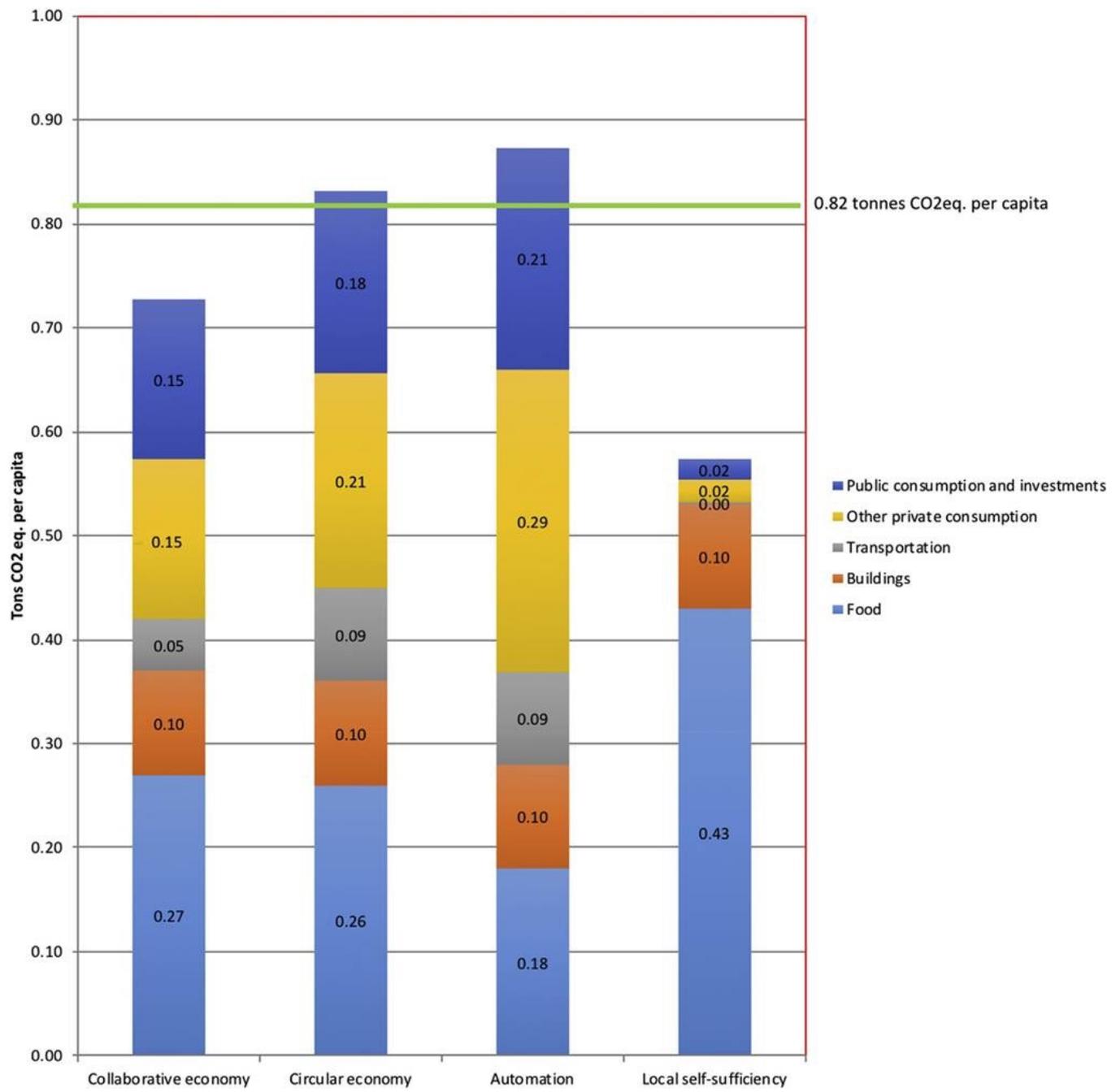


Figure 1: Four different scenarios for carbon dioxide emissions from Swedish consumption in 2050. The scenarios illustrate four different sustainability strategies: For climate, the target was set at 0.82 tonnes CO<sub>2</sub>/capita and year, corresponding to a 92 % reduction from current emissions. While this change is possible, it requires significant changes in technology as well as consumption practices, including a complete phase out of fossil fuels, changed diets and reduced travelling. Source: Fauré et al., 2019a.

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high emission intensity towards low emission intensity. It can also include lower levels of consumption.

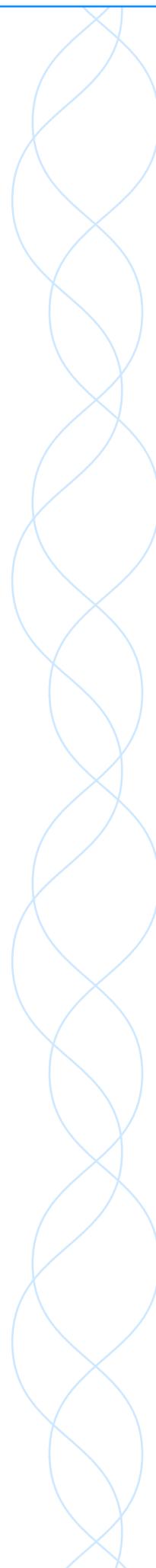
Modifications of consumption patterns may lead to significant greenhouse gas emission reductions. For example, a recent Swedish study (Carlsson Kanyama et al., 2021) looked at consumption changes in three areas: food, holiday travel and furnishing. By shifting expenditures to more sustainable alternatives, overall emissions could be reduced by almost 40% in these three consumption areas alone. From a mitigation perspective it is also interesting that the reductions could be made within a short time frame, without requiring any expensive investments by households. Recent literature reviews show that a range of changes in consumption patterns can make significant reductions of consumption-based emissions (Ivanova et al., 2020). Scenario studies show that these can be combined with a reasonable level of welfare and low unemployment in developed countries, leading to a more economically equal society; this increased equality could itself have welfare-enhancing implications (Victor, 2010, 2012).

While reducing environmental impacts is a key objective of sustainable development, so is ensuring basic needs for all. Poverty must be reduced, and basic needs in terms of food, water, health services, housing, etc., must be secured for people in both developing and developed countries. Reducing inequalities is one of the SDGs and is also necessary in order to reach other goals. As noted above, the pandemic has increased poverty, but even before the pandemic, there were signs of increased poverty and hunger due in part to increasing conflicts and to climate change (UN, 2021).

### The need to measure and address consumption-based emissions

Measuring consumption-based emissions is not enough. We also need strategies to reduce them. Doing so will help address other impacts of consumption.

Domestic resource use and domestic greenhouse gas emissions only tell part of the story of our environmental impacts. The research on consumption-based emissions is now progressing rapidly, and this development should be supported. Furthermore, governments should start to integrate this knowledge in their analyses and decision-making processes.





As an example, Sweden has set a so-called Generational Goal for “a society in which the major environmental problems in Sweden have been solved ... without increasing environmental and health problems outside Sweden’s borders” (Swedish EPA, n.d.). The Swedish authorities and funding agencies have also promoted research on these issues, for instance by supporting the PRINCE project, which aims to provide a better picture of the environmental impacts of Sweden’s consumption (see <https://www.prince-project.se/>).

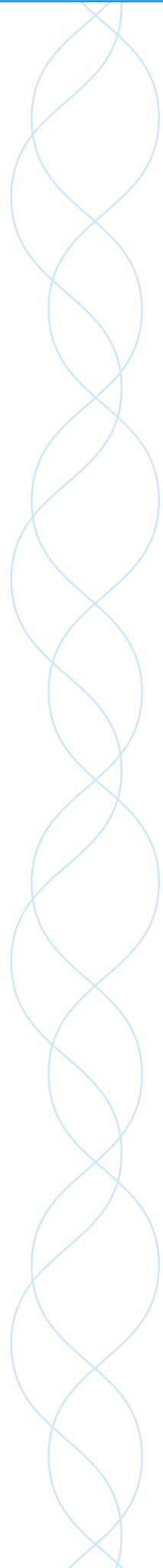
Having better data on consumption-based emissions is a first step towards more action. Among potential benefits and uses of the data are:

- Better knowledge on “hot spots” – e.g. products and supply chains associated with large impacts – can allow for political priorities and policies reducing the impacts;
- The development of better indicators for environmental policymaking;
- Improved understanding of supply chains and their environmental impacts;
- Data provides a basis for engaging stakeholders along supply chains;
- Guidance for support structures, e.g. technology transfers to regions with pollution-intensive industries;
- Better knowledge about products and services with lower emissions, which can serve as a basis for developing policies, aiming at shifting consumption from high emissions consumption to low emission consumption.

Research has highlighted the importance of public consumption and investments (Palm et al., 2019). One policy area of high relevance is therefore public procurement. For instance, public procurement is important for new infrastructure and buildings and vehicles. Requirements for buildings materials can drive technological development. Other examples include products such as food and furniture, which both public and private consumers buy.

## **Towards strong sustainable consumption governance: incorporating sufficiency perspectives**

If modelling research indicates that we need both technological advancements and behaviour change to stay within ecological limits (e.g. Alfredsson et al., 2018), the question is what kind of behaviour change is needed? Akenji et al. (2021) discuss three categories of consumer behaviour changes (see also Font Vivanco et al., 2016), also used in this report:



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1. **Absolute reductions in high-impact consumption**, such as flying and driving less, avoiding food products with large emissions, or opting for smaller offices;
2. **Modal shifts** towards more sustainable options, such as switching from driving private cars to using public transport or biking;
3. **Efficiency improvements**, such as shifting to electric cars, using more energy-efficient products, buying eco-labelled products.

Policymakers tend to favour the seemingly obvious solution: efficiency improvements. They seem to be the easier “sell”; they seemingly require limited changes in lifestyles and behaviour. They may even save some money for the consumer; for example, it may be cheaper in the long run to own an energy-efficient product or drive an electric car. This is also the traditional strategy advocated in policymaking related to sustainable consumption: promoting a type of “greener consumption” that relies on rational consumer choices and is based on traditional ideas of consumer integrity. Relevant policy approaches can then include green taxes, more consumer information and eco-labelling (Mont & Dalhammar, 2005). The results of such approaches are likely to be modest, as they do not address rebound effects, nor do they question current consumption patterns.

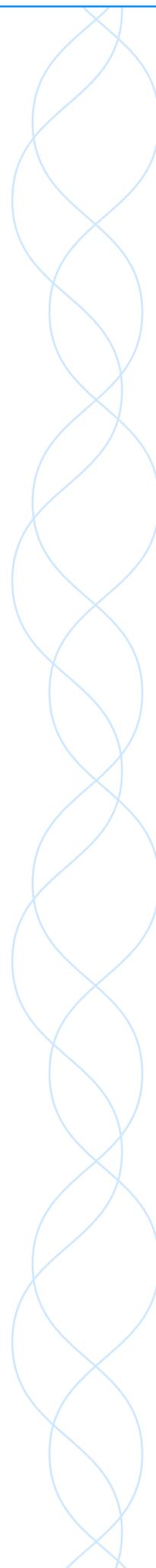
Modal shifts usually require greater behavioural changes. They require individuals to change their way of living, at least to some extent, which may require some time and effort. However, they do not necessarily address rebound effects and new impacts from changed behaviour. For instance, if people work from home and move more of their meetings online, which saves travelling and associated impacts, they also might choose to live in larger houses, farther from work, which can increase urban sprawl and lead to more driving for shopping, dropping kids at school, and other activities (Malmaeus et al., 2021). Behavioural changes might require more or less money, time and space; need special equipment; or shift the way household members use their homes or surroundings. Depending on the behavioural change, it can lead to both positive or negative rebound effects, meaning that the environmental impacts can increase or decrease (Eggestrand & Svenfelt, 2020).

Absolute reductions of high-impact consumption need to be discussed as well (cf. Alcott, 2010). Adopting policies to incentivize people to fly less, avoid car ownership, and reduce working time are examples of such strategies. This is what is sometimes labelled as a “sufficiency” approach: consumption should respect certain limits (Callmer & Bradley, 2020).

We argue that past governmental policies for sustainable consumption have primarily aimed at efficiency improvements and, to a lesser extent, modal shifts. However, policies that aim at modal shifts have often provided weak incentives for change. As an example, many cities that have invested in public transport still see an uptick in car ownership, as car ownership is still supported through various policies that range from planning of infrastructure to tax schemes that support company cars.

However, examples also exist of stronger policies aiming at reductions. These include taxes on fossil fuels, emissions of carbon dioxide, and air travel. None of these have been enough to put societies on a sustainable path.

We therefore characterize these past policies as **weak sustainable consumption policy** (see also Lorek & Fuchs, 2013). **Strong sustainable consumption policy** will be necessary to stay within ecological limits; such policies simultaneously incentivise efficiency improvements, modal shifts, and absolute reductions in consumption levels.





While it is easy to outline why this is necessary, the political challenges involved in adopting such policies are large. Yet our time is now up: the next decade is going to determine if we can reach the Paris Agreement targets, but also show if we can effectively address the resource challenges we face (UNEP, 2021). This year's meeting to mark the anniversary of the 1972 Stockholm meeting, Stockholm+50, provides an opportunity to kickstart such discussions.

There is no shortage of proposals in the literature on sufficiency-oriented policies. They range from labour-related policies such as reduced working hours (Coote, 2018), to green taxation targeting luxury goods (Mastini & Rijnhout, 2018), to personal carbon allowances where individuals are assigned an individual carbon "quota" (Fuso Nerini et al., 2021) as a way of enforcing consumption limits (Alcott, 2018).

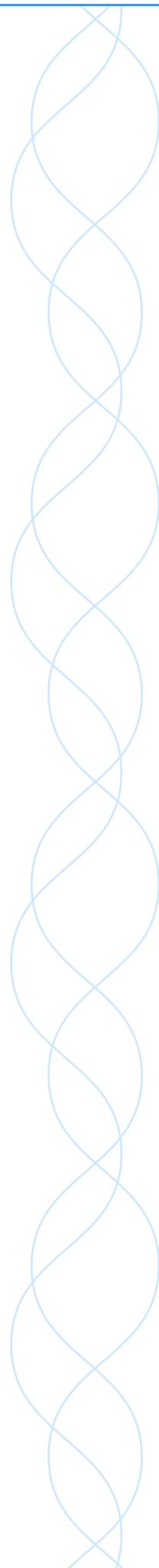
Another approach that is stronger is "choice editing" through different types of bans, for example, by phasing out fossil fuel cars, banning certain hazardous chemicals in manufacturing or products, or removing products from the market that have poor energy performance. Additional "sufficiency" approaches include freezing all new road building projects; taking stronger measures to discourage private car use; stopping airport expansion; banning short-haul flights; and keeping oil in the ground. Already-established economic policy instruments such as taxes can be differentiated based on products' environmental footprints (Akenji et al., 2021).

Despite all the attention given to the climate challenge, the "appetite" for new, progressive policies seems limited (Nordhaus, 2019), and in order for governments to be able to adopt such policies, trust between citizens and governments is a necessary foundation (for the example of green taxes being easier to implement in societies with high trust, see Fairbrother et al., 2019). Also, perceptions of fairness in particular and of effectiveness are associated with higher public acceptance of policy instruments for, say, aviation policy measures aiming at reduced climate impact (Larsson et al., 2020). We now see emerging signs that new policies are becoming a bit more radical, such as those reported by Akenji et al. (2021):

- Governments setting end dates for selling fossil fuel cars;
- Cities banning some fossil fuel vehicles and deciding against airport expansions;
- Cities experiencing problems with mass tourism taking actions to curb tourism levels;
- Governments assigning parts of oceans as conservation areas;
- Cities encouraging employees to reduce working time as an alternative to raised salaries (e.g. Larsson et al., 2021).

These policies signal a change in direction. They also aim to bring about well-being for citizens, since they often have different types of side-effects as well. Thus, a trade-off is not necessary between improved well-being and less consumption.

Policy experiments can be used to test and learn about new consumption behaviour. They also can be a way of creating trust and identifying unexpected side effects. One example of a large-scale policy experiment is the congestion-charging experiment in Stockholm, performed for seven months followed by a referendum (Gullberg and Isaksson, 2009). Public opinion changed during the trial and the results of the referendum gave support for the congestion charges.



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Another interesting development in Europe is the increasing willingness of the EU and the region's national governments to directly regulate products' sustainability characteristics, and only allow high-quality products with respect to energy efficiency, chemical content, longer lifetimes, and reparability on the market (e.g. Svensson-Hoglund et al., 2021; Dalhammar et al., 2021; Dalhammar et al., 2022). Stricter regulation on what will be allowed on the market, including removing poor quality products, is an essential element in moving towards a more sustainable economy.

Benefits come with better cooperation in achieving sustainable consumption. If political and economic instruments include several countries, action can be taken where the cost is at its lowest and free riders can be avoided (Larsson et al., 2019). Some "hot spots" for action, such as long-distance travel and impacts from food production, are dependent on coordination between sectors and countries because of the complex global nature of supply chains. A scenario analysis highlights that in order to achieve sustainable consumption levels in line with the Paris Agreement, changes have to be initiated early on, across several socio-technical landscapes, carving and creating pathways for sustainable development (Larsson et al., 2022).

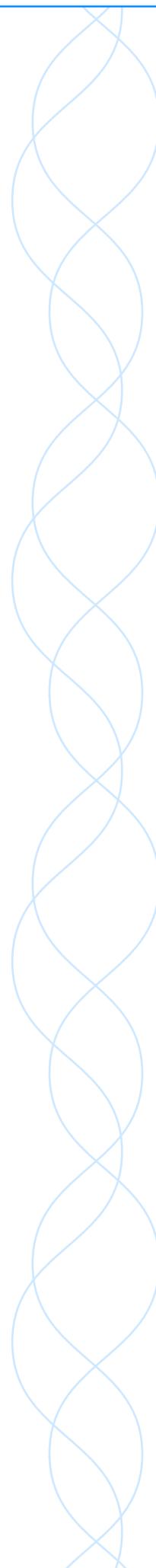
### Concluding remarks

We need to address consumption challenges and increase our understanding of how consumption policies can support efforts to reach important sustainability targets. Policies can be designed in ways that create larger public acceptance (Larsson et al., 2020), and many of the measures can also contribute to an increased well-being as discussed above. Planning and developing policies for fair and sustainable consumption practices are possible and needed. Planning a transition is clearly better than acting under constraints out of necessity.

Sufficiency can be many things. An agenda for reduced consumption impacts can be combined with politics for increased well-being. And in the absence of national sufficiency strategies, local and regional bodies can lead the way. According to Callmer and Bradley (2021):

*Our results suggest that local and regional governments that strive for a commitment to sufficiency should formulate clear goals that serve to set environmental limits, for instance, in the form of carbon budgets, and then steer toward well-being for the inhabitants within these limits. Efforts should be made to secure stable funding for work within sustainable consumption and waste prevention, especially for projects with synergies in terms of reducing consumption and strengthening non-market relations. Using public procurement is another key tool.*

Leadership is required at all levels: international, national, regional and local. Stockholm+50 offers an opportunity to kickstart this agenda.





## 7. References

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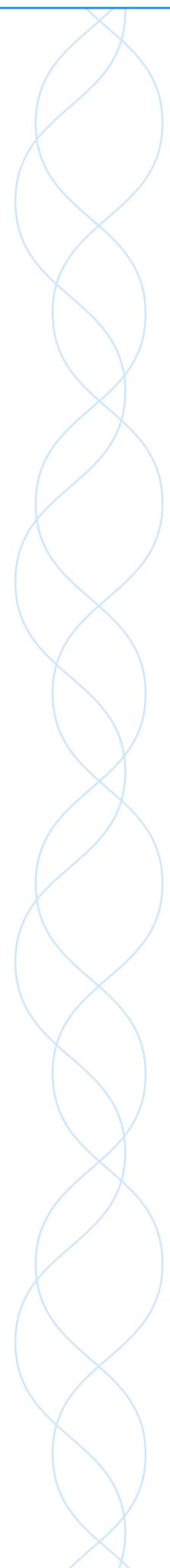
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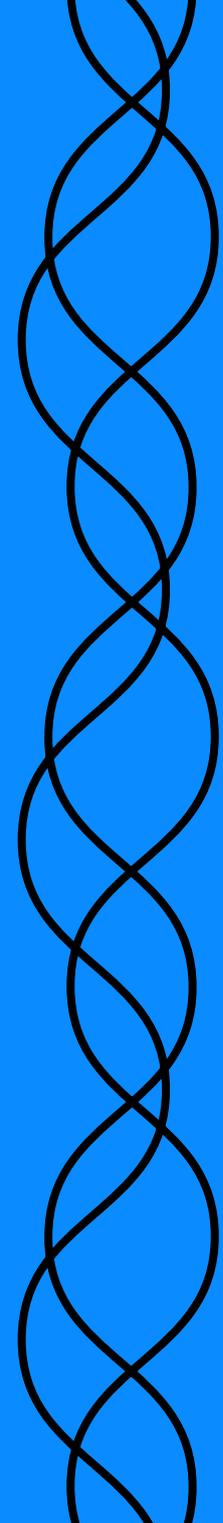


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