Transition analysis

Economic transition: The costs and benefits of (in)action

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KIN Dutch Climate Research Initiative
Accelerating transitions together

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Following discussions between the KIN and a large number of (climate) research organisations, the KIN launched an initiative in 2025 focusing on 'the costs of inaction'. Climate measures cost money, but it is now clear that current policy (or the lack thereof) will prove even more costly. A meeting on this theme was organised at the KNAW in April 2025, bringing together a number of stakeholders from the worlds of science, policy, insurance and finance, among others, which led to various follow-up steps. One of these follow-up steps is a KIN transition programme centred on the theme of 'the new economy'. Economic transition: the costs and benefits of (in)action. We are organising this programme based on the hypothesis that, in our current economy, we are (or will be) irrevocably reaching limits in all sorts of areas, whilst there are economic alternatives that yield significant benefits, both financially and in other dimensions. The rationale for this hypothesis can be found in the transition analysis below. During the Crutzen workshop (28 & 29 January 2026), we will explore how each of us relates to this transition, and take a first step towards transition interventions that demonstrate the potential of the desired transition in practice.

1. Historical perspective: GDP as 'the economy'

In the post-war decades, 'economic growth' has come to occupy a central place in our thinking about social development. It shapes the news media, and our economic thinking has a significant influence on political policy and our own daily actions. Since roughly the Second World War, we have largely equated 'the economy' with GDP and money.[1] If GDP grows, we say that the economy is growing and that this is a good thing. This idea has become entrenched in political, social and economic institutions. But because GDP is primarily a measure of quantitative output, many (positive and negative) effects of GDP growth on the environment and society remain out of sight. This is illustrated by a rough global estimate which finds that two-thirds of all corporate profits come at the expense of people and the environment.[2]

As GDP growth has come to be seen as the primary objective of our economy, we have increasingly geared our economic system towards this goal. In the process, we have increasingly lost sight of the distinction between the real economy (the production and consumption of goods and services) and the financial economy (cash flows, loans and investments). Key historical turning points in this process were the abandonment of the gold standard (the pegging of the dollar to the price of gold) following the Bretton Woods agreements[3] and the repeal of the Glass–Steagall Act[4] . Money became fiat, based on trust rather than physical backing, and commercial banks were permitted to combine their traditional lending activities with risky trading and investment activities. This allowed the financial system to grow exponentially and gave banks the scope to create money themselves through lending. From a financial perspective, this has proved remarkably successful: the amount of money and financial assets has grown exponentially in recent decades.[5,6,7] However, the result of these and other historical choices is also a financial sector that is many times larger than the real economy and which is primarily focused on increasing financial wealth. Meanwhile, the relationship with the actual productive capacity of people and nature has diminished, and inequality is growing.[8,9] The most important lesson

from the history of money is therefore that the structure of the monetary system is never neutral or natural. It is shaped by, and is always part of, a complex socio-economic system.[10]

The logic of financial growth and wealth is that it concentrates among those who already have it, because capital generates a return on capital (through interest, shares and property), whilst people without capital are dependent on labour, which appreciates in value at a slower rate.[11] At the same time, financial growth appears to create value, but this is often achieved by shifting costs elsewhere or to a later date (for example, health damage caused by PFAS, microplastics and pesticides, or ecological damage caused by extraction in the Global South).[12,13,14] The richest 0.001% of the world now own three times more than the bottom half of the global population, and this gap is widening.[15] This inequality is directly linked to environmental issues because the richest 10% are responsible for 77% of global emissions.[16] Thus, partly due to the financial system, our current economic system has essentially become a collective mortgage on the future: further economic growth is only possible through the constant exploitation of our living environment, collective resources and social capital.

It is striking that things have come to this, given that, historically speaking, 'economics' can best be understood as *the study of society*. This involves questions such as 'what do we collectively need for a good life now and in the future', and 'what do we want to produce for that purpose, how, and for whom'?[17] History shows that communities have answered these questions in countless ways. Long before money existed, there were already debts and forms of trade and reciprocity[18] . Contemporary examples, such as the Māori economy, also show that economics and welfare thinking can be closely intertwined, even within a context where money is 'simply' earned.[19] However, due to globalisation and cultural homogenisation, the diversity of perspectives has been increasingly narrowed, and we have now arrived at a dominant global economy based on growth through extraction, the privatisation of common goods, efficiency and short-term thinking, and a strict separation between ecology, economy and society.[20] This is underpinned by (neoclassical) assumptions that have become dogmas (such as 'trickle-down economics', the view of *humanity* as *'homo economicus'* and GDP as a measure of progress), by knowledge that is now outdated, and by institutions that were established and developed in response to conditions in a different era, but no longer fit the current context.[21,22,23]

2. The current regime: a public-private limited company focused on short-term growth and innovation

Since the neoliberalisation of the 1980s, a dominant economic regime has emerged in which the state, the business sector and knowledge institutions have become increasingly intertwined.[25,26,27] Together, they sustain a system that is formally geared towards stability, economic growth and innovation[28] , but which in practice primarily promotes the formation of monopolies and oligopolies[29,30,31,32] because these yield the highest and most secure returns for shareholders. However, economic history shows that once a monopoly or duopoly is established, the incentive for innovation often actually diminishes,[33] and historically, both the most radical critics of capitalism (Vladimir Lenin) and its most radical advocates (Friedrich Hayek) agreed that monopolies were tantamount to oppression.[34] Stability is therefore by no means a given within this system: since the 1990s, financial, economic and social crises have followed one another in rapid succession, with emergency measures being deployed each time that offer short-term relief but simultaneously sow the seeds for new and deeper forms of instability.[35,36] In order to maintain the current system – which is wrongly regarded as stable – the division of roles is clear: public institutions create infrastructure, take risks and subsidise innovation, whilst the profits are systematically privatised.[37] Profits flow to shareholders and capital markets, whilst the costs of climate change, biodiversity loss and damage to health are passed on to society.[38] The billions in aid to banks during crises, and the structural subsidies for fossil fuel and energy-intensive sectors, are not isolated incidents but structural manifestations of this regime.[39] Companies prioritise shareholder value over long-term interests, and innovation functions primarily as a vehicle for new markets and financial products. Even governments and research institutions are geared towards fragmentation, risk management and compliance, which optimises the existing model without raising fundamental questions about the direction of 'progress' or sustainability.[40,41,42]

This regime is further legitimised by a cultural context of individualisation, polarisation and fragmentation. Freedom of consumption is the dominant norm, and is institutionally encouraged. Where governments do focus on sustainability, they often do so primarily through innovation and improvement without questioning the very foundations of growth. Citizens are primarily addressed as consumers who must take individual responsibility (flying less, taking shorter showers, consuming more consciously)[43] whilst collective solutions and structural shifts in power are systematically overlooked. The narrative of an inevitable trade-off between the economy and the climate acts as an ideological shield here: it suggests that progress always requires more growth, even when that growth is at the heart of the problem. Although some advocate the idea that economic expansion and ecological sustainability go hand in hand ('green growth'), recent analyses show that economic growth on a global scale is fundamentally constrained by planetary boundaries.[44] While efficiency improvements and technological innovation may reduce the ecological footprint locally or temporarily[45] , the overall pressure on biodiversity, raw materials and the climate inevitably increases with continued growth[46] . Green growth thus exists primarily as a rhetorical concept, legitimising the dominant system without bringing about structural change.

From a transition analysis perspective, this system is a textbook example of lock-in. Policy, market dynamics and cultural norms are so interlinked that they constantly reinforce and perpetuate one another, creating a collective resistance to change. The result is a system that legitimises itself through the promise of improvement, yet blocks the conditions for genuine transformation. What is produced is primarily a gain in time for the existing model: relative improvements that enable further growth, or, in the worst case, a postponement of the inevitable.

3. Risks and the cost of (in)action

Systemic crises are now piling up at a rapid pace: climate change, loss of biodiversity, health crises, water and soil stress, rising inequality and social unrest. A recent meta-analysis identified no fewer than 58 critical crises manifesting simultaneously across six fundamental areas: ecology, technology, politics, economics, ethics and human existence, and emphasises how intertwined these problems are.[48] These crises are no longer abstract future scenarios, but are increasingly being felt in the form of extreme weather conditions, pandemics, migration pressures, food insecurity and geopolitical instability, and inevitably translate into financial costs on a global scale. Recent research by the ECB shows that 75% of loans from financial institutions, and 72% of the activities of all other businesses, are 'highly dependent' on one or more ecosystems. And this dependence translates, not entirely surprisingly, into all manner of direct costs.[4950]

The economic damage caused by climate change is already enormous and growing rapidly. In the European Union alone, climate- and weather-related extremes between 1980 and 2022 have led to economic losses of more than €650 billion, of which approximately €170 billion occurred in the last five years[51] , and in 2025 macroeconomic losses from heatwaves, droughts and floods were estimated at €43 billion, with projections rising to €126 billion by 2029[52] . In the EU's agricultural sector, current annual losses due to climate hazards average €28 billion per year and could rise to over €90 billion per year in disaster years by 2050.[53] In the built environment in the Netherlands, the total cost of damage from foundation problems alone could reach €54 billion.[54] Globally, leading researchers warn that the monetary damage caused by climate change could reach an estimated $38 trillion per year by 2050 if no effective mitigation takes place, a level many times higher than what would be required to meet the targets of the Paris Agreement, and this is still a conservative estimate in which tipping points and other chain reactions have been factored in only to a limited extent.[55,56]In addition, the physical risks to businesses are significant; analyses of the largest listed companies show that the annual costs arising from physical climate risks are heading towards $1.2 trillion per year by 2050.[57] These financial burdens manifest themselves not only in direct damage, but also in higher insurance premiums, rising food prices (for example, extreme heat in 2022 caused European food prices to rise by approximately 0.7 percentage points, according to the European Central Bank)[58] , in loss of income[59] , and disruption to production chains.

Furthermore, the EEA also shows that in many countries more than 50% of the damage is uninsured[60] , which puts pressure on premiums and public recovery costs. The scale of these costs underscores that the climate crisis is not merely an ecological challenge, but also a profound economic and financial crisis whose impact is already being felt today and whose true costs will increase exponentially if policy remains unchanged. This picture is confirmed not only by science, but also by central banks, insurers, accountants, public institutions and strategic consultancies, which are warning of unsustainable damage to the economy and society. [61,62,63,64,65,66,67,68,69,70,71,72]

And although the exact scale of the financial damage varies — with estimates ranging from hundreds of billions to trillions per year — one conclusion has been indisputable since *the* 2006 *Stern Review*: inaction is many times more expensive than taking timely and appropriate action ("doing something"), both in terms of climate mitigation and adaptation.[73] Examples of the benefits of taking action can be found, among other places, in a recent TNO report commissioned by the Dutch Sustainable Energy Association (NVDE), which shows that a more sustainable energy system better protects us against price shocks.[74] Without solar and wind power, energy bills would have been even higher in recent years. And according to the IEA, wind and solar power in the EU will have already delivered €100 billion in savings between 2021 and 2023.[75] Yet, 20 years after the Stern Review, the overall problem has only grown, despite our increased understanding of the potential risks and costs: we are approaching a point beyond which the damage will exceed our ability to mitigate or repair it, leading to economic collapse. Yet political and policy breakthroughs remain largely absent. This is not only because government and business are trapped in the regime of short-term logic and mutual dependencies outlined earlier, but also because analyses often fall short in three crucial dimensions: who bears the costs or reaps the benefits (citizens, businesses, states, future generations)? When do they occur (immediately or only decades from now)? And in which dimension do they play out (financial, ecological, social or moral)? Precisely because these questions are insufficiently asked – let alone answered – the burden is repeatedly shifted onto groups in vulnerable positions, future generations and the global ecosystem, whilst the status quo is ostensibly maintained.

4. A multitude of perspectives, a shared compass?

The realisation that infinite growth is impossible on a finite planet dates back as far as the Club of Rome (1972).[76] At the same time, the lock-in described has proved stubborn: the more evidence there is that persisting with economic growth leads to enormous damage, the stronger the political and social resistance to change seems to become. The costs of inaction are mounting, and the question of how we can move away from growth is becoming increasingly pressing. Recent calculations based on the Club of Rome's models suggest that we are following almost exactly the scenario predicted in 1972, which is steering us towards economic collapse.[77,78]

From a transition perspective, there are therefore plenty of reasons to believe that the tide is turning. A transition is a process in which an established system (in this case, that of economic growth) is confronted with rapidly changing circumstances to

which it is increasingly unable to adapt.[79] Climate change, geopolitics, an ageing population and digital disruption are all trends that threaten the foundations of economic growth (rooted in fossil fuel extraction). This is evident first and foremost in economic growth itself, which, according to both the OECD and the World Bank, is beginning to decline worldwide.[80,81] Extreme examples of this include Japan, where growth has been stagnant since the 1990s[82] , and wages in the UK, which have been completely stagnant since 2008[83] , and also the Dutch GDP, which grew by just 0.2% in 2023[84] . According to Statistics Netherlands' (CBS) Comprehensive Well-being Monitor, the growth that has taken place in recent years has, moreover, come at the expense of nature, leisure time and social contacts.[85] Furthermore, a large body of scientific research shows that the negative impact of GDP growth on health and the living environment is beginning to weigh increasingly heavily on the average citizen, whilst the links between growth and employment, between growth and the purchasing power of ordinary workers, and between growth and well-being are becoming increasingly tenuous. [86,87,88]

At the same time, the pressure for change is also increasing: alternative concepts and ideas are gaining ground. For example, in its Spatial Outlook 2023, the PBL presented various future scenarios for the spatial planning of the Netherlands in 2050; one of these scenarios is called 'Green Country' and outlines a clear post-growth perspective.[89] According to the PBL, respecting ecological limits is a top priority in this future, even if this comes at the expense of freedom of consumption. In this approach, we must shift the focus from quantitative growth (such as consumption and economic growth) to qualitative growth (such as growth in biodiversity and happiness). According to the Post-Growth Netherlands think tank, this is the first time in 40 years that a scenario from a national government advisory body has been explicitly based on post-growth principles.[90] Furthermore, in practice, local authorities (including the City of Amsterdam) are also embracing the doughnut economy, mission economy, degrowth, wellbeing economy, and indigenous economic principles such as Ubuntu and Buen Vivir, whilst among consumers, circularity and reduced or fairer consumption are becoming the norm in certain circles. Moreover, a recent study shows that more than 735 organisations across 35 European countries are active in the field of 'the new economy'.[91]

Post-growth is not a standalone scenario, but an approach that encompasses a range of possible visions of the future. Much like the doughnut economy[(92),] for example, it primarily describes a destination: an economy that is in balance with the Earth's carrying capacity, in which decisions are made collectively and prosperity is distributed fairly. It is an economy explicitly designed to flourish without constant economic growth. Approaches such as degrowth and the wellbeing economy[93] can be seen as different strategies for reaching that destination.

Degrowth advocates a democratically planned reduction in production and consumption in affluent economies, particularly in the Global North, and is explicitly political in nature: it directly challenges the capitalist growth model and the associated power structures. Conceptually, the wellbeing economy is closely aligned with post-growth in that it rejects GDP as a primary policy objective and places human and ecological wellbeing at the centre. In practice, however, the wellbeing economy functions less as a strategy that confronts the regime. Here, the challenge to power and capital is primarily indirect, via new indicators, measurement methods and policy priorities, whereby change is pursued gradually from within existing institutions. But this is precisely where a tension lies: when a systemic framework such as the doughnut economy is repurposed as a guideline for individual actors, projects or organisations, the focus shifts from collective, structural change to incremental adjustments at the local or individual level. Whilst no single actor can operate within planetary boundaries on their own, system boundaries are thus translated into optimisation goals for individual organisations. It is therefore important to prevent the structures that cause overshoot from remaining largely intact, whilst the responsibility for change is placed on actors who cannot fundamentally influence those structures.

Degrowth, the doughnut economy, the well-being economy, commons-based approaches and ecological macroeconomics overlap in their diagnosis, but differ greatly in strategy and sometimes compete for legitimacy, funding or influence. In the search for common ground between these and other approaches, numerous review studies, policy reports and social projects have now been published, which more or less arrive at the same conclusions (Table 1).[94,95,96,97] The core of these emerging perspectives is that we need a way of facilitate a way of living together in which production and consumption are in balance with planetary boundaries and do not harm others. It is therefore not a question of determining which concept is theoretically superior, but which combination of ideas can actually bring about change in society. The question is not who is right, but what combination is needed in terms of scale, quality and efficiency, and what this requires of individuals, society, policy, entrepreneurs and institutions.[98] Movements make progress through unity of direction, not through unanimity of thought.

Table 1. Overview of common categories and directions within post-growth initiatives

Category	Dominant current regime	Transformative direction
Human	Human beings as *homo economicus*: rational, calculating and focused on self-interest and material maximisation.	**Holistic view of humanity & plurality of values**: people primarily seek meaning and connection with others, nature and themselves.
Value	Value reduced to money and growth (GDP) as an end in itself.	**Redefining value**: multifaceted, including care, community, ecology and well-being. Growth is not a goal, but well-being within limits is.
	The financial sector as self-enriching and detached from the real economy.	**Reforming the financial system**: making finance serve the real economy once again; democratic control and a shift in taxation from labour to capital, pollution and raw materials.
Consumption	Assuming infinite growth, detached from planetary boundaries. Here, nature as capital is replaceable by technology or money.	**Well-being within limits & limited substitutability**: natural capital is fundamental; other forms of capital depend on it. Physical limits are fixed and cannot be resolved with money alone.
Production	Focus on efficiency and damage limitation; "less bad" rather than truly good.	**Regenerative design**: organising universal basic needs (housing, food, energy) in such a way that they stimulate ecological recovery and social cohesion. Bio-based production, circular materials and locally anchored flows.
Ownership	Policy designed top-down, dominated by technocracy and market mechanisms; citizen influence is marginal.	**Participation & democratisation**: organising decision-making at the lowest effective level (subsidiarity), with communities gaining control over essential resources. Ownership shifts towards the commons and steward ownership.
Distribution	The economy is viewed as a linear and predictable system, driven primarily by price mechanisms and individual choices, with relationships, care and interdependencies largely overlooked.	**Understanding the economy as a complex adaptive system and as a network of relationships.** This requires acknowledging feedback loops, lock-ins and tipping points, but also making visible care, interdependencies and social embeddedness. It calls for collaboration between disciplines and societal actors so that the economy is no longer reduced to individual behaviour and price mechanisms, but is approached as a dynamic whole of ecological, social and moral connections.

	Belief in trickle-down economics: growth automatically benefits everyone; market mechanisms are neutral and fair.	**Equality, justice & inclusion**: The market is not neutral but depends on one's view of humanity and the world. Actively redistribute to meet basic needs, tackle inequalities and questioning power structures.
	Capitalism is seen as the endpoint of economic development; colonial structures remain intact.	**Post-capitalism & decolonisation**: recognising that the current system is historical and temporary; developing new forms of ownership, cooperation and global justice.

Although a genuine transition has yet to materialise, its urgency and promise are clearly evident. Continuing economic growth is costly, disastrous and unjust, but an abrupt end to fossil-fuel-based, extractive and unfair growth could also cause massive shocks to employment, investment and accumulated wealth. At the same time, it offers the opportunity for an economy within ecological limits, in which justice, democracy and well-being are central. The challenge is clear: how do we move beyond growth, through the increasing systemic pressure, polarisation and interests of fossil fuel, agro-industrial and financial actors, and find the arguments, examples, conviction and scientific evidence for a desired economic transition.

5. The new economy in practice and the benefits of doing something

Most studies into the costs of (in)action somehow get bogged down in a (paper) call for 'better policy'. But just like the general promise of many 'new economy' concepts, such calls have had little effect so far. Fortunately, the new economy is not only described in theory, but is already being put into practice by initiatives that each demonstrate in their own way how things can be done differently. In these new economic practices, the principles of a post-growth economy are, in a sense, being tested on a small scale.[99] We are thinking here of social entrepreneurship, initiatives from civil society or the government, which are attempting to organise basic needs in a new way. Whether it concerns food, energy, healthcare, housing or mobility: the aim is to find a way of producing and consuming that is not dependent on fossil fuel extraction, and is cheaper and more accessible. On a small scale, initiatives in these areas demonstrate that an economy geared towards the ecological and equitable organisation of basic needs is not only possible but can also yield a wide range of positive effects: from enhancing individual well-being and strengthening social cohesion to promoting local resilience, reducing environmental impact, and creating innovative forms of collaboration and community building.

However, there is no single alternative practice that can replace the current norm overnight. Like most transitions, the economic transition is characterised by diversity and plurality. Not because of a lack of transformative will, but because of the reality that these initiatives are, for the time being, forced to operate within the current system, an individual practice may appear transformative only to a limited extent. However, taken together, a broader movement becomes visible: a collective cloud of initiatives that, collectively, are beginning to form an alternative norm across all domains (Figure 1). It is precisely because initiatives that are transformative in their own domain collaborate and exchange with initiatives that are transformative in another domain that we move from isolated, stand-alone, individual practices to a movement that is greater than the sum of its parts. If we look at the practice of the new economy from a distance, we can identify five domains in which it encounters barriers, but at the same time gain insight into how to overcome those barriers and what the preconditions for further dissemination might look like.

Value

A new economy calls for a broader, multifaceted understanding of value that also takes into account biodiversity, clean air, clean water and (preventive) health. An increasing number of initiatives are making these values explicit. True Price and the Impact Economy Foundation are mapping hidden social and ecological costs, whilst platforms such as the Natural Capital Coalition and the Value Balancing Alliance are developing methodologies to integrate natural and social value into corporate reporting as standard. Movements are also emerging at the policy level, such as the Wellbeing Economy Governments Partnership (WEGo), in which countries such as Scotland, Iceland and New

Zealand are working together to develop an economy that prioritises wellbeing over GDP growth. Closer to home, initiatives such as the Monitor Brede Welvaart (CBS) and the PBL are working on ways to make broader value visible in national decision-making.

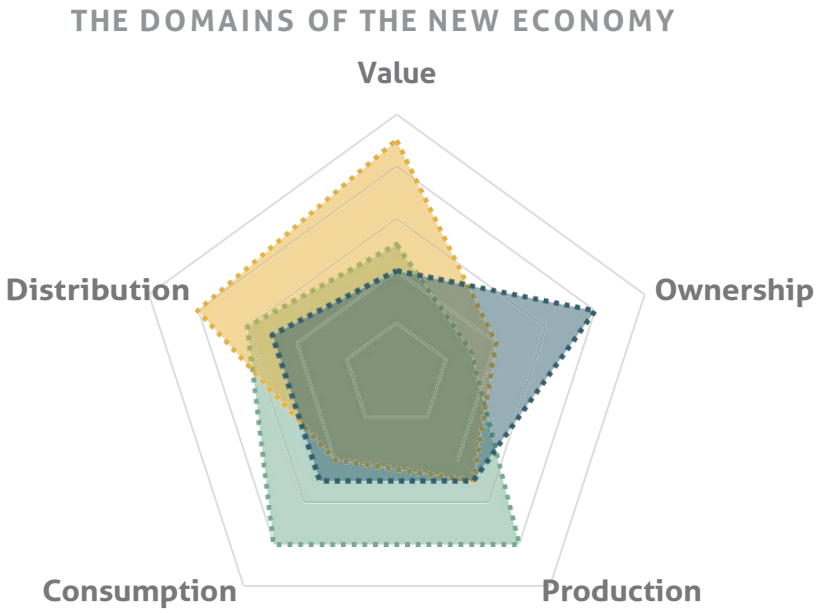

Figure 1. The domains of the new economy. Practical initiatives almost always operate within one of these domains and are transformative to a greater (further out) or lesser (further in) extent in relation to the current norm.

Ownership

In the field of ownership, new forms are emerging that make entrepreneurship less dependent on shareholders, such as cooperatives, commons-based models (for example, community land trusts) and forms of public or hybrid ownership in which collective interests take precedence. A well-known model is steward ownership, in which voting rights and economic rights are separated, allowing a company to focus on its raison d'être; large companies such as Carlsberg and Bosch apply this model. Although this is interesting, practice shows that steward ownership does not automatically lead to sustainable business operations: companies such as Rolex have steward structures, but contribute to biodiversity loss through raw material extraction and marketing. Steward ownership is also susceptible to elite capture, as a small board can set the course, and articles of association or rules can be relatively easily altered. Worker cooperatives offer a more robust alternative here: members' democratic participation is embedded in the ownership structure, which provides protection against short-term interests and takeovers. Mondragón in the Basque Country is a striking example: with 80,000 worker-owners and an annual turnover of 11 billion euros, it competes globally across various sectors, from bicycles (Orbea) to high-tech components and cultural projects (Guggenheim Bilbao, Basque Culinary Centre).[100] Research shows that worker cooperatives have healthier and happier employees, start-ups have a higher survival rate, and cooperatives weather crises better thanks to mutual support mechanisms within the network. They think long-

term, which contributes to more sustainable business practices than conventional capitalism.[101] The impact of this model on the Basque Country illustrates its potential: from a region with high unemployment and low socio-economic prosperity in the 1970s and 1980s, it grew to become the second-richest region in Spain, with one of the lowest poverty indices in Europe and excellent scores on the Human Development Index, including life expectancy that ranks among the highest in the world.[102] ,[103] ,[104] This transformation stands in sharp contrast to other regions that have been affected by globalisation, liberalisation and the shift of production to Asia, such as the industrial heartland of the United States and the North of England,[105] and demonstrates that cooperative, collectively based forms of ownership can be a powerful means of achieving economic sustainability, social equality and resilience.

Production

In a new economy, production shifts from large-scale and linear to circular, local and regenerative. Production takes place as close as possible to the point of consumption, using renewable, bio-based and circular raw materials. New technologies and forms of collaboration ensure that costs are no longer passed on to the environment and society, but are structurally factored in and returned to the producer. Well-known companies such as Patagonia, ASKET, Auping, Tony's Chocolonely, Fairphone and Repeat demonstrate that sustainable production can go hand in hand with quality and broad social impact, whilst collective initiatives such as the Urban Mining Collective and Biobased Nederland show how circular loops can be closed in the construction sector.

Myne demonstrates that by sorting metal waste in a more sophisticated manner, it can supply recycled materials of a higher quality. This shift from quantity to quality has resulted in a fourfold increase in the company's turnover. United Economy facilitates transactions between sustainable businesses and organisations, and offers public authorities a channel for conscious procurement. In this way, sustainability is increasingly linked to collective ownership, shared responsibility and new forms of value creation. This can pose a threat to a (financial) revenue model, as selling new products less frequently can mean lower turnover. However, this need not be the case if revenue can be generated from additional services such as personalisation, maintenance and repair. This is why, in a new economy, production is more about offering services than about manufacturing products. The relationship between the producer and the consumer plays a crucial role in this.

Consumption

In this model, consumption shifts from being a driving force behind depletion to a means of strengthening employment, circularity and social value. This does not mean buying more, but consuming differently: with an emphasis on quality, reuse and repair rather than quantity and replacement. Consumers play an active role in this, for example by participating in local production (energy cooperatives, urban farming) and by making conscious choices based on true prices that reflect ecological and social costs. The Just Enough Foundation emphasises that enough is often better than more, and offers, via a product guide, insight into companies that produce within planetary boundaries.[106] Alternatives are also emerging in mobility, such as MyWheels, Future Mobility Network and Deelfiets Nederland, and in the consumption of clothing, tools and electronics via platforms such as the United Repair Center. Through these initiatives, consumption is becoming increasingly linked to responsibility, regeneration and cooperation.

Distribution

The question of how the fruits of production and consumption are distributed is central to a new economy. This concerns not only income distribution, but also access to affordable basic services such as housing, food, healthcare, education, water and energy. The emergence of regenerative food systems is rethinking both the 'what' and the 'how' of our food chains. Initiatives such as the Robin Food Coalition, Nowastearmy, Fork Ranger, the Landbanking Group and Chocolatemakers demonstrate how food, land and distribution can be valued and organised differently to minimise waste and strengthen local cycles. In the built environment, experiments are emerging with collective water systems and collaborative approaches to foundation problems, where production and distribution go hand in hand. An economy that is understood as a complex adaptive system requires recognition of feedback loops, lock-ins and tipping points, but also of care, interdependencies and social embeddedness. This means that policy and institutions must actively combat inequality, challenge power structures and organise redistribution across ecological, social and financial dimensions. The aim is not only equality of opportunity, but also inclusive decision-making and equitable power relations, whereby communities gain ownership and control over the resources that shape their lives.

6. Knowledge-in- Action

Together, these diverse initiatives do not form a blueprint, but rather a colourful palette of transition practices. Each of them touches on different areas of the economy, but collectively they demonstrate that the contours of a new economy are already taking shape. At the same time, these examples show that implementing and scaling up such initiatives presents challenges, such as ensuring structural financial sustainability, navigating existing policy frameworks and market dynamics, and developing inclusive models that guarantee diversity and equal access. This perspective also poses an existential threat to the current (locked-in) functioning of the Dutch economy. It implies a decentralisation of control and ownership, the retention of profit and value for the community rather than for external financiers, and more limited monetary growth in exchange for a restoration of ecological and social values. Ideally, this is a world in which far less government, but also far fewer large corporations and industry, are needed for a happy and healthy life. Strengthening that plurality on the basis of shared principles and ratified standards is at the heart of a new economic agenda.

The KIN views these kinds of transition practices as a starting point for a research agenda: practice challenges and rejects the current norm based on the hypothesis that an economic transition is both possible and desirable. Each initiative explores, in its own way, what the new economy looks like and how it can be developed through practical action. To support the next phase, the KIN aims to bring together practical knowledge of economic transition with research, policy and the business community. By linking economic analyses of *the costs of inaction* to *the* practical *benefits of taking action*, we want to explore together what steps producers, researchers, policymakers, entrepreneurs and civil society organisations can take, and what research questions can inform this process.

The aim of a KIN transition programme is to learn from new practices where the barriers within the current system lie, and to identify the (institutional) preconditions required for the desired transition. Drawing on practical examples and existing initiatives, we investigate where the momentum lies, why it is succeeding there, and how this can have an impact at various levels. The added value of bringing together research and practice lies in supporting, legitimising, institutionalising and potentially helping to disseminate these practices on a much larger scale. In this process, we use research, creativity, imagination and action as tools to make progress. We focus on:

a. Jointly formulating (research-based) questions
b. Funding research that directly informs interventions
c. Community building and connecting initiatives
d. Breaking through dominant practices and creating openings for long-term systemic change
e. Supporting desired alternative practices

In this way, we are building a new economic narrative that is future-proof and does justice to people, nature and society.

7. Crutzen workshop

The Crutzen workshop on 28 and 29 January focuses on the points where economic activity, social values and ecological limits converge, and where transition practices can have a real impact. The economy is an abstract concept, and the pressure to grow is a systemic problem, but businesses, initiatives and organisations experience the consequences in their day-to-day operations. During the workshop, we will explore together how we can strike a balance between the separate worlds of procurement and management, costs and benefits, regulation and practice. Examples of themes we can explore further during the workshop on the costs of (in)action and the benefits of doing something include the agricultural sector, the built environment and the local economy, but there are of course other areas where the costs of (in)action and the benefits of doing something can be put into practice.

The current food system is optimised for maximum production through the use of artificial fertilisers, pesticides, economies of scale and market forces, and is supported by financial systems, governments and research institutions. This model delivers economic growth and cheap food, but the costs of inaction are enormous: soil depletion, ecological damage and vulnerability to climate change. Alternative farming practices such as organic, regenerative and shorter supply chains can increase resilience, improve nutritional value and contribute to healthier diets, whilst simultaneously delivering economic and ecological benefits.

Climate risks are already a tangible reality in the built environment: flooding, heat stress and drought are already incurring costs and will lead to increasing financial risks in the future. From entire neighbourhoods struggling with foundation problems to uninsurable areas and uninhabitable neighbourhoods. For insurers, banks and financiers, but also for homeowners and tenants, the costs of inaction are therefore serious and potentially dramatic. At the same time, the housing market has become individualised, the rental market liberalised, and property has become an investment asset. The housing crisis therefore concerns not only affordability and (stalled) construction, but also the need to make the existing housing stock more sustainable, flexible and less dependent on finance. It is clear that radical changes are needed, and there are indications that potentially enormous gains can be achieved through an orchestrated transition. Through smarter and public financial strategies, different forms of bio-based, circular and energy-generating renovation and construction, sustainable damage repair, the democratisation and collectivisation of housing, and the flexibilisation and industrialisation of renovation and construction, we can potentially better mitigate the risks of climate change and make a positive contribution to mitigation, whilst also creating new jobs, reducing the cost of housing, and contributing to health and a healthy living environment. But how do we make these kinds of alternatives financially viable, how do we maximise the (soft) benefits, how do we make the collective costs of inaction attributable to those who profit from it, and the profits from transition recoverable for those who invest in transition?

The local economy also plays a crucial role: the COVID-19 pandemic, among other things, highlighted that a local economy based on proximity, trusted production and short supply chains is a way to build resilience. It also leads to the retention of financial value within an area, stronger community ties and more sustainable

production. It is the context within which businesses with a sustainable or social mission and new, more democratic forms of ownership can succeed. The potential gains are therefore not only economic resilience but also stronger regional economic growth, more sustainable production and consumption, and, across the board, greater scope for public investment. But how can these kinds of alternative economic and financial systems be facilitated? How can the collective gains of this transition be weighed against the potential private losses? What preconditions and economic principles do businesses need to succeed in this?

In order to answer these and other questions, integrative themes such as legislation and regulation, action research and network building will also play a key role within each 'landing site'. These themes help to establish links between different practices, sectors and fields of knowledge, so that transition efforts reinforce one another and have a collective impact at the systemic level.
During the workshop, we will explore together which specific issues are best suited to developing this research agenda. In this regard, it is important for KIN that:

- There is a clear sense of urgency regarding the climate
- That there are costs of inaction which are structurally ignored in the current model
- The potential benefits of transformation are significant
- That there are clear practices which provide a basis for the profit hypothesis
- That there are clear forms of (existing) knowledge that can be mobilised

Within the Knowledge in Action call to be funded by KIN, the starting point is therefore not further theoretical research, but the utilisation of existing economic transition practices: where are the costs of inaction tangible, how can we maximise the benefits of action, and how do these practices contribute to structural system changes?

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