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Sustainable Happiness

Why Waste Prevention May Lead to an Increase in Quality of Life

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FOREWORD

The World Happiness Report 2012, commissioned by the United Nations, noted that the tools of happiness research have the potential to recast the debate between economic growth and environmental protection. Moreover, it calls for an exploration of the established links between happiness and environmental sustainability. This report is an attempt to answer that call.

When thinking of happiness, waste prevention is not the first thing that springs to mind, with reason. Our relationships, health, and purpose in life have a far greater impact on our level of happiness than sustainable behaviours per se.

The intent of this report is not to belittle the impact of the things that make life truly worthwhile, but to explore a new territory, to open avenues, and to take a fresh look at how behaviour affects our quality of life.

We wish to address questions such as: How do sustainable behaviours influence our level of happiness? Why is there a link between sustainable behaviours in general, and waste management in particular, and happiness? And how may happiness research contribute to better societies, a more sustainable future, and an improvement of our lives?

Meik Wiking

CEO

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EXPLORING HAPPINESS

The aim of this chapter is to present an introduction to the happiness agenda. What is happiness and how are governments, organizations and academics working with the field?

HAPPINESS: A HOT TOPIC ON THE POLITICAL AGENDA

These days, it is difficult to avoid hearing or reading about happiness in newspapers, books, or on television. Happiness is everywhere: in the news, in policy documents, in the words of politicians and leading scientists, including Nobel laureates. Happiness has become an inescapable topic for science and policy. During the last 10 years, it has entered the global, national, and local agenda, attracting attention from a wide range of stakeholders such as researchers, government officials, and international organizations, as well as citizens.

Scientific research. While happiness studies have been underway for 40 years, most advances, such as the development of brain imagery, the conception of measuring methods for happiness, and investigation into happiness determinants, have taken place over the last two decades. Academia has become increasingly interested in subjective well-being, quality of life, and happiness. Psychologists, sociologists, economists, and philosophers investigate a broad range of topics related to human welfare, such as what makes people happy, how people define happiness, why some societies are happier than others, and how happiness produces socioeconomic benefits like increased productivity and reduced health spending. The word is reaching students as well. At UC Berke-

ley, Stanford University, and the London School of Economics, subjects like "Happiness Economics" and "Happiness Studies" are now on the curriculum. A few years ago, the most popular course at Harvard University was on happiness. In Denmark, the universities of Copenhagen and Aarhus now offer courses on the topic.

Officials and governments. Happiness is not only a subject of academic interest. Local and national governments are increasingly interested in how happiness research can contribute to public policy. The early mover was the Kingdom of Bhutan, which in 1972 replaced Gross Domestic Product with Gross National Happiness as a measure of national prosperity.3 More recently, the National Academy of Sciences, in the United States, established a panel to examine how happiness measurements can be used in the development of public policy.4 In 2008, President Nicolas Sarkozy established the Commission on the Measurement of Economic Performance and Social Performance,5 which delivered a report aiming to measure human well-being more broadly than through GDP. Under the initiative of Prime Minister David Cameron, the United Kingdom now monitors well-being broadly conceived, which includes happiness,6 and countries like the Netherlands,7 Germany,8 and Japan9 have taken similar steps, and are moving towards using happiness as a parameter for progress.

Given the tangible benefits to individuals and societies of moderately high well-being, it is ever more urgent that we act to effectively put well-being at the heart of policy and generate the conditions that allow everyone to flourish".¹

World Happiness Report, 2013

Subjective well-being data can provide an important complement to other indicators already used for monitoring and benchmarking countries performance, for guiding people's choices, and for designing and delivering policies."

OECD, Guidelines on Measuring Subjective Well-Being, 2013

Cities, too, are incorporating happiness measurements into statistics and development strategies. Since 2005, Hong Kong has tracked its inhabitants' happiness in its happiness index. In 2010, the City of Seattle launched the Seattle Area Happiness Initiative, ¹⁰ More recently, the cities of Somerville (Massachusetts, USA)¹¹ and Dragør (Denmark)¹² have conducted happiness surveys among their citizens to inform and guide policymakers, and other cities are following their lead.

International organizations. Happiness is at the core of the agenda of international organizations, too. Since May 2011, OECD has proposed using its Better Life Index to monitor happiness and other elements of subjective well-being. In 2012, UN Secretary-General Ban Ki-moon made the explicit connection between the development of better measurements of human welfare and the necessity for "a new economic paradigm that recognizes the parity between the three pillars of sustainable development," which are constituted by "social, economic, and environmental well-being." According to him, "together they define gross global happiness."

HAPPINESS AND GDP

One of the reasons for the increased interest in happiness research is the growing dissatisfaction among citizens, environmentalists, and policymakers with the undelivered benefits and environmental costs of economic growth. Material affluence alone is now increasingly perceived as incapable of accounting for quality of life. Robert F. Kennedy famously affirmed that GDP "measures everything, in short, except that which makes life worthwhile." Obviously, human well-

being is more than the added value produced in a given period and evaluated through GDP.

Thus a paradigmatic shift, where GDP is no longer given the ultimate priority, is underway. From an economic model founded on quantitative criteria (e.g. the increase of material production) to one that emphasizes quality of life. In other words, the productivist blueprint that emerged from the Industrial Revolution is now under scrutiny for good reasons: depletion of natural resources, reduction of biodiversity, pollution, production of vast amounts of waste, and stress. Behind the dissatisfaction with the current economic model, there are pressing demands in favour of a socioeconomic model that would place human needs and well-being at the core of public policies.

With their focus on the determinants of happiness, academic studies play a major role in this current shift of our social priorities. Happiness research helps to identify what really makes us happy - that is, the conditions and factors contributing to the improvement of our lives in various domains (family, social relations, work, health, local communities, cities, and countries). The goal is to understand the mechanics of happiness, but also to increase quality of life. This is why happiness is on the agenda of democratic societies; it is what ultimately matters for most people. Happiness research attracts so much attention today because happiness research provides tools for enhancing quality of life. A focus on happiness has tremendous implications for how we apprehend social relations, work environment, work/life balance, transportation, urbanism, and the environment.

THE UNITED NATIONS HAPPINESS RESOLUTION

The General Assembly [is] conscious that the pursuit of happiness is a fundamental human goal ... [and] happiness as a universal goal and aspiration embodies the spirit of the Millennium Development Goals."

UN General Assembly, Resolution 65/309, 2011

AS MANY DEFINITIONS OF HAPPINESS... AS THERE ARE PEOPLE?

At first glance, one might think that happiness is a hazy concept because people have different understandings and definitions of the term. As a result, it would be a waste of time to talk about happiness and to use it for public policy-making. However, the fact that we all have different ideas about what will make us happy (even if there is an almost universal agreement on the contribution of, for instance, love or social inclusion to happiness) is often mistaken to mean that we have different conceptions of happiness. In

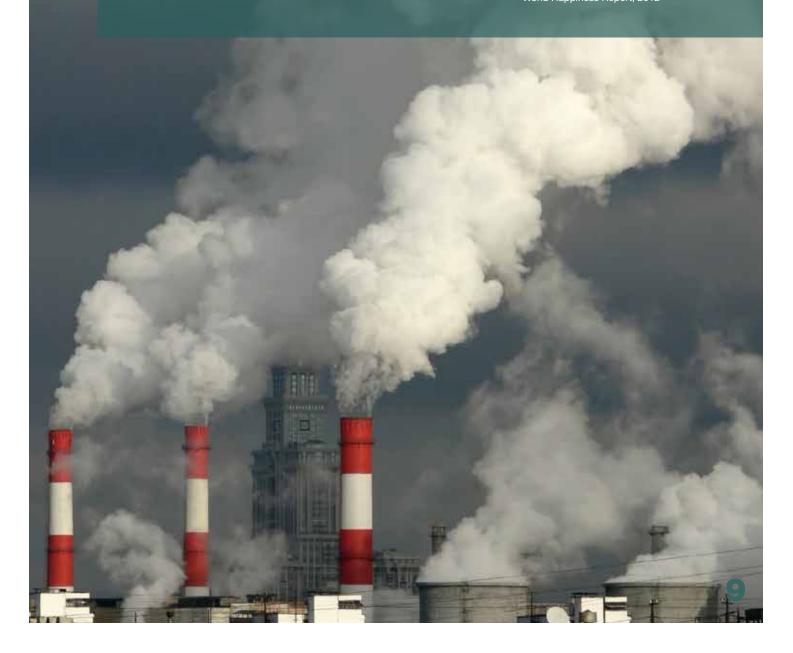
other words, individuals part ways on what they think will make them happy. Some (maybe mistakenly) think that money, fame, and status will make them happy. Others believe that raising kids will make them happy. In both cases, individuals hold strong views on what will make themselves happy, on affective or evaluative grounds – not on what happiness is. As a result, the concept of happiness makes sense, and it makes sense to try to explore which activities or situations generate happiness.

Happiness is neither a frivolity nor a luxury. It is a deep-seated yearning shared by all members of the human family. It should be denied to no one and available to all."16

Ban Ki-moon, Secretary-General, United Nations

...the world's economic superpower, the United States, has achieved striking economic and technological progress over the past half century without gains in the self-reported happiness of the citizenry. Instead, uncertainties and anxieties are high, social and economic inequalities have widened considerably, social trust is in decline, and confidence in government is at an all-time low. Perhaps for these reasons, life satisfaction has remained nearly constant during decades of rising Gross National Product (GNP) per capita."

World Happiness Report, 2012



HAPPINESS LEXICON

Eudaimonia

Eudaimonia is a generic term referring to forms of happiness emphasizing the cognitive and reflective human capacities. Eudaimonic happiness involves the development of one's self, abilities, and talents. Eudaimonia is usually contrasted with "hedonia," which focuses more on feelings than flourishing.

Gross National Happiness

Concept developed in Bhutan which builds on the idea of using happiness as a measure of progress and good governance. This initiative consists of a composite index of 33 cluster indicators sorted into nine domains: (1) psychological well-being, (2) health, (3) time use, (4) education, (5) cultural diversity and resilience, (6) good governance, (7) community vitality, (8) ecological diversity and resilience, and (9) living standards. The Bhutanese initiative is only one possible path. Other initiatives and indicators will emerge in the future.

Hedonia

Hedonia is a generic term referring to all understandings of happiness emphasizing the affective experience under the form of feelings. Happiness consists in the positive balance between positive and negative effects. It is usually contrasted with "eudaimonia," which focuses on flourishing.

Life satisfaction

Life satisfaction traces whether individuals are satisfied with their life as a whole. The methodology for measuring life satisfaction relies on self-assessment: individuals are asked to evaluate or rank their own life through questionnaires. Sometimes individual satisfaction is tracked for specific domains such as work, family, and social relations, which is then labelled domain satisfaction instead of life satisfaction.

Subjective well-being

Subjective well-being is a psychological concept that combines both affective and evaluative happiness. It has three components: positive effects, negative effects, and life satisfaction. Positive and negative effects are properly hedonic components, while life satisfaction is more evaluative.

WHAT IS HAPPINESS?

As a new science, happiness research is already rich in concepts, theories, findings, and data.¹⁷

Happiness researchers have studied many aspects of our lives: commuting, work environment, relationships, and parenting. Furthermore, they have identified different understandings of happiness. Some are centred on individual effects, while others are concerned with individual self-evaluations; some are made of temporary feelings, while others imply a lasting sense of contentment.

Two understandings of happiness are useful to present. ¹⁸ On the one hand, happiness can be "affective," which refers to the presence of positive feelings like pleasure, joy, and relatedness, and the absence of negative ones like pain, sorrow, and anxiety. On the other hand, happiness can be "evaluative," which refers to a positive judgement one formulates on her own life. Affective happiness is usually presented as momentary, composed of passing emotions and feelings. A woman is happy if she feels so. This happiness is often characterized in the literature as being "hedonic." Affective happiness may be prone to adaptation because feelings are by definition fleeting, and because individuals become accustomed to either the event that provokes a given pleasure or pain, or to the modification of their life circumstances. For instance, studies have shown that the affective gain of winning the lottery may almost entirely disappear after several months. ¹⁹

Evaluative happiness is thought to be more stable, less prone to adaptation. One reason lies in its judgmental nature: individuals are happy if they say so, i.e. as a result of a judgment. Usually, they are asked to evaluate themselves through questions like: "On the whole, are you 'very satisfied,' 'fairly satisfied,' 'not very satisfied,' or 'not at all satisfied' with the life you lead?" Or How happy are you? On a scale from 0 (extremely unhappy) to 10 (extremely happy). Such questions are used for various large-scale polls and surveys such as the Eurobarometer, the Gallup World Poll, the European Social Survey, and the World Values Survey.

Without taking a position in the controversy about the "real" nature of happiness, it is worthwhile to note that each conception tells a story about a different aspect of what is important for individuals: it is important for individuals to "feel good" and to "do well." Both of these aspects are essential to quality of life. Part of the value of contemporary happiness research lies precisely in the exploration of the various dimensions of what makes a happy life. This is the main contribution of happiness research: *unfolding the sources and aspects of human well-being*.

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HOW WE COMPILED THIS REPORT

Several sources were used to write this report: (1) academic research contained in books, scientific articles, and reports from authoritative institutions such as the Earth Institute at Columbia University and the OECD, (2) information concerning concrete projects, (3) and interviews with experts and practitioners within the field.

1. Academic research

The main research studies came from international research published in well-established academic journals (British Medical Journal; Canadian Psychology; Energy; Environment and Behaviour; Psychology; and Social Indicators Research) and books that have made major contributions to the field. From such academic articles and books, we extracted findings that are relevant for waste prevention. In addition, reports from international organisations such as the United Nations and the OECD also provided valuable input. Examples include:

- Earth Institute, Columbia University (2012). World Happiness Report
- Earth Institute, Columbia University (2013). World Happiness Report
- OECD (2013). OECD Guidelines on Measuring Subjective Well-Being
- The New Economic Foundation (2009). The Happy Planet Index 2.0
- Frey, Bruno (2008). Happiness: A Revolution in Economics
- Layard, Richard (2005). Happiness: Lessons from a New Science
- Corral-Verdugo, Victor, et al (2011) "Happiness as Correlate of Sustainable Behaviour: A Study of Pro-Ecological, Frugal, Equitable, and Altruistic Actions That Promote Subjective Well-Being"
- Frank, Robert (2010). Luxury Fever
- Bhutan (2012), Bhutan: In Pursuit of Sustainable Happiness
- Commission on the Measurement of Economic Performance and Social Progress, France (2009).
 Report
- Happiness Research Institute, Denmark (2014). The Happy Danes: Exploring the Reasons Behind the High Levels of Happiness in Denmark
- Commission on Measuring Well-Being, Japan (2011). Measuring National Well-Being Proposed Well-Being Indicators

2. Concrete projects

An important complement to the academic research are waste-management initiatives undertaken in Denmark and abroad. We sought out projects that would explicitly connect waste management and happiness. Such investigation offers valuable data. The initiatives reviewed include:

- The Zero-Waste Project, in Tversted, Denmark, where several families agreed to the goal of drastically minimizing or completely eliminating their trash over one year.
 - Svanholm, a collective living situation with 130 residents, where, over the past year, they have focused on reducing waste.
 - Ren By Aarhus (Clean City Aarhus), a comprehensive initiative in the City of Aarhus aimed at reducing trash in public places.
 - The Zero-Waste Project, in Tjæreborg,
 Denmark, a new project involving a whole
 village sorting and reducing their trash,
 using different methods of implementation
 than those in Tversted.

3. Interviews:

To complete our data, we conducted interviews with leadings experts, researchers, and practitioners in this field. The goal was to uncover research findings on the connection between waste management and happiness. The experts include:

- Laura Musikanski, CEO and Founder of Sustainable Seattle and The Happiness Initiative, Seattle, Washington, United States
- Raymond De Young, Professor of Environmental Psychology and Planning, University of Michigan, United States
- Tim Kasser, Professor of Psychology, Knox College, United States
- Catherine O'Brien, Professor of Education, Cape Breton University, Canada
- Aleksander Zidansek, Professor of Physics, University of Maribor, Slovenia
- Thomas Dyrmann Winkel, Industrial Ph.D.-stud., Affaldsselskabet Vendsyssel Vest
- Pernille Thomann Villesen, Project Manager, Ren By Aarhus
- Toke Baillie, Resident and Head of Waste Management, Svanholm
- Heidi Tanja Dahlberg Nielsen, Participant, Zero-waste Project, Tversted, Denmark
- Helle Illum Aagaard, Participant, Zero-Waste Project, Tversted, Denmark
- Ulla Borup Guntofte, Participant, Zero-Waste Project, Tversted, Denmark
- Tine Jepsen, Participant, Zero-Waste Project, Tjæreborg, Denmark
- Niels Remtoft, Special Consultant, Danish Waste Association



IS THERE A LINK BETWEEN SUSTAINABLE BEHAVIOURS AND HAPPINESS?

According to the World Happiness Report 2012, happiness studies have the potential to contribute to and deepen the debate on the relationship between economic growth and environmental protection. Moreover, it calls for an exploration of the established links between happiness and environmental sustainability. The aim of this chapter is to present these links.

FROM SACRIFICE TO SATISFACTION

In political discourse and public debates, sustainability has often been framed as implying a way of life that could compromise freedom of choice and constrain individual lifestyles. In such cases, sustainability appears to be traded for individual happiness.

For example, when former U.S. President George H.W. Bush, prior to the United Nations Rio Earth Summit, in 1992, stated that "the American way of life is not up for negotiation," he framed the sustainable agenda as something requiring personal sacrifice. People would need to accept lower well-being in exchange for greener, more sustainable policies. This kind of statement can easily induce people to believe that sustainable living and happiness are inherently incompatible, leading to the dilemma: quality of life or sustainability. Since individuals want healthy and safe environments for themselves and future generations, but at the same time do not want to compromise their quality of life, they face a difficult choice.

This dilemma stems from the misleading belief that quality of life entirely depends on economic growth and that personal well-being is raised through

consumption and material abundance. Happiness research provides evidence of the ambiguous effects of material affluence on happiness and subjective well-being.²⁰ After a certain threshold, additional wealth actually fails to improve individual and collective well-being.²¹

As a society, we are starting to tackle this misleading belief with the help of science, realizing that happiness is not necessarily something one attains through more material affluence and consumption. To have happy and fulfilling lives actually requires more than increasing GDP or larger pay checks at the end of the month.

Therefore, working towards decoupling happiness from consumption has the potential to lead to happier and more sustainable communities. This is why a greater focus on changing our personal consumption patterns through waste prevention programs could prove very useful in creating lasting sustainable happiness in our communities. Several initiatives have already shown how the two dimensions can work together.

WHERE SUSTAINABILITY AND HAPPINESS GOES HAND-IN-HAND

Over the last decade, a range of initiatives have promoted sustainability and happiness *together*. They articulate the profound idea that the two outcomes are mutually dependent: happiness is nothing without sustainability – and the other way around. As such, they aim at the same goal: *advancing human wellbeing and enhancing quality of life*.

The Happy Planet Index (HPI) is a project born out of The New Economic Foundation (NEF). The NEF proposes an alternative to GDP for measuring country efficiency. The HPI combines life expectancy with experienced well-being and divides it by the country's ecological footprint, or resource consumption. Specifically, it ranks how many happy lives a country produces per unit of environmental input. Indeed, without being a happiness index per se, HPI makes possible a new way to measure a country's progress that incorporates individual well-being, their effect on the environment, or their sustainability factor. It addresses questions such as our capacity to live long and happy lives within the resource capacity of the planet.

The Happiness Initiative²³ Sustainable Seattle²⁴ was founded in 1991 and focuses on making Seattle a healthier, more vibrant, and more sustainable city. It has established several community-based indicators that measure progress towards sustainability. Based on these different indicators, the initiative educates and engages citizens in sustainable ways of life, and inspires local initiatives and organizations to continue the work to make more sustainable communities. In 2012, the Happiness Initiative broke off from Sustainable Seattle and became an independent non-profit that measures happiness. Local government, interests groups, businesses, and citizens can use the group's indicators to determine where there is need for improvement in areas connected to happiness, including environmental quality.

But perhaps the connection between sustainability and happiness is best illustrated by the concept of "sustainable happiness," which was coined by Catherine O'Brien, an associate professor of education at Cape Breton University, in Canada. Sustainable happiness is happiness that contributes to indivi-

dual, community, and global well-being without the exploitation of other people, the environment, or future generations. When perceived this way, it is no longer possible to imagine a future where the pursuit of happiness is *not* somehow connected to sustainability. As the human species continues its quest for happiness and well-being, more emphasis must be placed on sustainability and the interaction between sustainability and happiness. Another project is the Sustainia initiative, which explains how a sustainable world could look like in the future. Rather than representing a future of sacrifices and restraints Sustainia shows how sustainable solutions can contribute to quality of life.

Through initiatives such as those mentioned above, there is a growing awareness of how sustainability and happiness can go hand-in-hand, and the data shows how the two dimensions are working together. It is therefore important for any public policy that sets ambitious goals in terms of waste management to consider the happiness dimension and pay attention to research in this field.

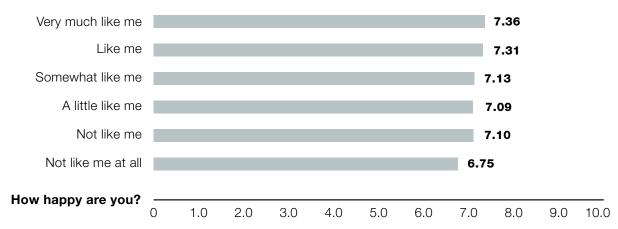
SUSTAINABLE HAPPY PEOPLE

Over several decades, millions of responses from people all over the world have been collected in surveys such as the World Values Survey, Gallup World Poll, and the European Social Survey. This allows sociologists, economists, and other researchers to identify trends and patterns. This also enables happiness researchers to begin to identify the elements common to people who report high levels of happiness. By comparing millions of responses on subjective well-being, researchers can now document what most of us suspected. That people with strong social networks are, on average, happier, and that happiness is linked with health, relationships, work, wealth, and purpose in life.

But the data also supports a link between sustainability and happiness. Looking at the figures from the European Social Survey, which includes responses from around 50,000 people from 30 nations, a pattern emerges. People who agree with the statement "It is important to care for the environment" report higher levels of subjective well-being.

It is important to care for nature and the environment





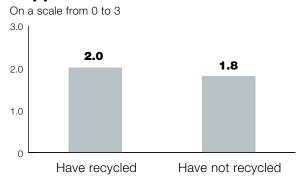
People who identify with the statement "It is important to care for nature and the environment" are, on avarage, happier.

Source: European Social Survey, 2012

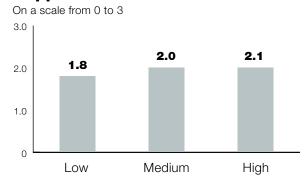
A similar pattern can be found in other surveys, which include questions on sustainable behaviours, environmental values, and subjective well-being. Data from the World Values Survey show that people who recycle are happier than those who do not. On a scale from 0-3, ranked from "Not happy at all," "Not very happy," "Quite happy," and "Very happy," figures from 14 European countries show that people who recycle are on average happier than those who do not. The difference is 0.2. This may not seem like

much, but on a 4-point scale it is a considerable difference. A way to put the difference into perspective is by looking at the average happiness levels of people who have been asked to rank themselves as being in the low-, middle-, or high-income group. The data show that the difference in happiness levels between the low-income group and the middle-income group is equal to the difference between the group that recycles and the group that does not.

Happiness level



Happiness level



The measured difference in happiness levels between people who recycle and people who don't are the same as the difference in happiness between low-income and middle-income groups.

Source: World Values Suvey

...a growing number of evidence reports a link between pro-environmental or sustainable behaviour and several psychological positive consequences; happiness is one of them."

Victor Corral-Verdugo et al. "Happiness as Correlate of Sustainable Behaviour," 2011

In line with these findings, academic studies from Knox College, in Illinois, the University of Sonora, and the University of Michigan have debunked the misconception that there exists a necessary trade-off between happiness and sustainability. Studies show that subjective well-being and ecologically responsible behaviours are indeed compatible.26 Moreover, they tend to demonstrate that living more sustainably actually promotes more fulfilling and happier lives.27 People who engage in more sustainable behaviour (such as riding a bike instead of driving a car, only starting the washing machine when it is full, and buying seasonal produce) report higher levels of subjective well-being than those who do not engage in such behaviour. This link has inaugurated an area of research, which have been dubbed the "positive psychology of sustainability," focusing on the positive psychological consequences of sustainable behaviour.

As will be shown in the next chapter, waste-managing behaviour may have a positive impact on the two forms of happiness: affective and evaluative. On the one hand, more sustainable behaviour and waste prevention boost positive feelings: people actually feel good about efficiently managing waste. On the other hand, more sustainable behaviour and waste prevention promote positive evaluations: people are more satisfied with their lives by efficiently managing waste.

One study showed a correlation between happiness and actions that reduce the amount of garbage the individual produces, such as buying products in refillable packages and looking for ways to reuse things. This points to a link between waste prevention and subjective well-being – a link also found among the zero-waste projects in Northern Denmark, where several families reported that they had experienced higher levels of happiness and quality of life during the experiment.²⁸

It is very imporant to feel that we are part of something bigger than ourselves. And the way that our project is done, I do feel like you can say that people will get more quality of life from participating."

Ulla Borup Guntofte, Participant, Zero-Waste Project, Tversted, Denmark

LESS WASTE - MORE HAPPINESS

Zero-waste is an organization that works to eliminate waste in Denmark. It results from the cooperation between public, private, and academic stakeholders. Their mission is to take the Zero-waste initiative to the national level in Denmark, and do this through inclusive methods where the citizens' own ideas are the focus. In 2013, the group launched a pilot project in the towns of Hjørring and Brønderslev; 105 households joined in the five-week project. It was a big success, and waste was reduced by an average of 51%.

In January 2014, a larger project was initiated in the town of Tversted, and the organization is planning to turn the whole city into a zero-waste area. The project will run for a full year, and it is up to the participants themselves to come up with the most convenient ways to sort their trash. One of main focus points is to give participants as much autonomy as possible, and only provide the basic framework and necessary guidance and infrastructure to make it happen. Several of the participating families have reported high levels of subjective well-being and linked this to their involvement in the projects. A sense of purpose, a stronger community feeling, and an improvement of the visual beauty of the local surroundings may explain this.

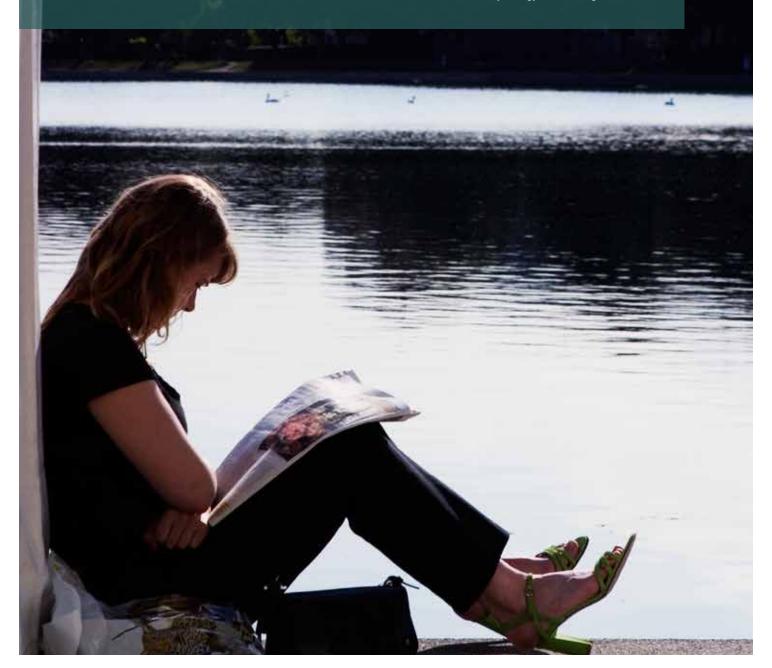
Another project is *Ren By Aarhus*, initiated by the municipality of Aarhus. It includes many different initiatives all related to waste management, in an effort to make individuals, private companies, and other actors think of waste in a new and positive manner. One central theme is trying to foster feelings of happiness and meaning in people when they participate, either in a direct or indirect way. The organizers have found that this helps generate communication, social bonds, community, and confidence about waste in a positive manner, and ensures continued growth and success for the programs into the future.²⁹

If anyone had told me before the project started that I would become happier from reducing my waste, I would have been critical of it, but now, every time that I see how little trash we produce, I get a "Yes we did it" feeling and I feel happier."

Heidi Tanja Dahlberg Nielsen, Participant, Zero-Waste Project, Tversted, Denmark

The idea that has to be countered is the idea that engaging in positive environmental behaviour will make you unhappy. That is a typical belief that exists in consumer culture, and so long as that belief continues to have a hold on people's minds, then it is going to be relatively difficult to get them to listen to alternatives. Therefore, a good approach is to present the evidence showing that the standard belief is incorrect, and instead emphasize the evidence that engaging in positive environmental behaviour actually can promote happiness. I think you do have to confront the misinformation that is out there."

Tim Kasser, Professor of Psychology, Knox College, Illinois



People get a kick out of recycling and reusing their trash. Especially the children find it fun to explore the clothing recycle area, and find things they can use. It gives a lot of joy to see other people find value in things that you would normally have gotten rid of."

Toke Baillie, Resident at Svanholm and head of waste management

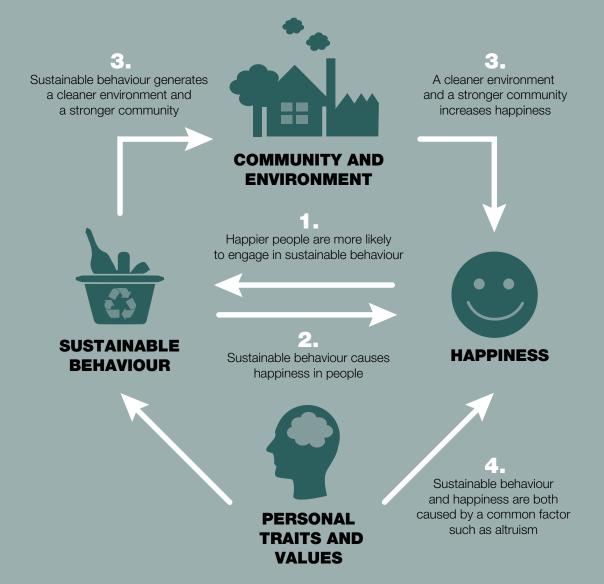
Svanholm is a collective-living estate in Denmark whose 150 residents have focused on reducing and sorting their trash. Adopting this focus has had a positive influence on the residents. Their most recent project in particular has helped nurture meaning and happiness among the residents by offering direct proof of what food waste costs them each month and what they save by reducing such waste. They have set up a separate trash bin for all the food waste. At the end of the month, they know exactly how many kilos of food they waste, which can be converted into a monetary amount. And the individual benefits of waste management go well beyond that.

Therefore, we find several pieces of evidence supporting the idea that happiness research can contribute to reframing the debate between economic growth and environmental protection and changing the perception of sustainability. Moreover, since happiness is an important dimension and motivation in

individual lives, it seems essential to pay attention to it when designing public policies aimed at enhancing people's quality of life. And, to completely unleash happiness potential, it is important to dispense with myths and misconceptions such as the false choice between sustainability and happiness.

The evidence suggests that public policies promoting more sustainable lifestyles, like waste prevention, will foster a greener planet and improve quality of life.³⁰

While happiness is caused by a diverse set of factors, such as social relationships, self-development, trust, and security,³¹ sustainability should be added to the list. Conversely, sustainable behaviours may enhance happiness. Even if research on the subject is still in its early days, one pattern is emerging: *sustainable behaviours and happiness are not opposed.* They are, in fact, connected. In the next chapter, we seek to understand why.



FOCUSING ON WASTE MANAGEMENT, THERE ARE AT LEAST FOUR POSSIBLE EXPLANATIONS FOR WHY THERE IS A LINK BETWEEN SUSTAINABLE BEHAVIOURS AND HAPPINESS.

- 1 Happier people are more likely to engage in waste management and sustainable behaviours. Positive emotions or a sense of flourishing may lead them to care more for their surroundings and act accordingly.
- 2 Waste management and sustainable behaviours induce happiness in people. Waste prevention may be conducive to happiness because actions like recycling, diminished consumption, and waste reduction increase subjective well-being and satisfaction with life.
- Waste management and sustainable behaviours improve the environment and civil society, which subsequently increases happiness. So, it is not waste management itself, but the consequences of waste management that lead to happier lives.
- 4 Happiness and sustainable behaviours may both be caused by a third common factor and may not necessarily be directly linked.

WHY IS THERE A LINK BETWEEN SUSTAINABLE BEHAVIOURS AND HAPPINESS?

In the previous chapter, we learned that evidence points towards a connection between sustainability and happiness. People who behave sustainably are on average happier – but why? This chapter offers some answers.

EXPLANATION 1:

HAPPIER PEOPLE ARE MORE LIKELY TO ENGAGE IN WASTE MANAGEMENT AND SUSTAINABLE BEHAVIOURS

Happier individuals are more likely to behave sustainably and, therefore, to manage their waste than less happy individuals. This could be the result of positive emotions and mood.

In recent years, happiness research has expanded its focus from looking at the causes of happiness towards also exploring the *effects* of happiness.³² In particular, there has been a great deal of interest in the happiness effect on the bottom line of companies, as happy employees are more productive.³³

Evidence also supports the notion that happiness has a positive effect on our health. Happier people live longer – much longer in fact – than less happy people do; the effect on health of happiness corresponds to the effect of being a non-smoker compared to a smoker.³⁴ Therefore, as happiness has an effect on our health and productivity, it might be that the same mechanism comes into play when it comes to the connection between happiness and waste prevention. Happy people may act more sustainably.

It could be that happier people are more likely to engage in waste prevention and sustainable behaviours as a result of positive emotions or being "in a good mood." This leads us to care more about nature, our environment, and the next generation – and act accordingly.

Further studies are needed, but some argue that happiness causes more sustainable behaviour such as a decreased consumption of resources and thus a reduction in waste.³⁵ In other words, happiness could induce waste management.

There is a strong correlation between happiness and sustainability, which means that I imagine that happier people produce less waste, but nevertheless, the correlation is hard to prove."

Aleksander Zidansek, Professor at the Faculty of Natural Sciences and Mathematics, University of Maribor

Positive emotions are among the dispositional antecedents that promote sustainable behaviour. Happiness, one of the most positive emotions ... seems to be also related to a decreased consumption of resources"

Víctor Corral Verdugo, "The Positive Psychology of Sustainability," 2012

As for the happiness effect on health, there is an emerging body of knowledge regarding the impact of positive emotions and moods on sustainable behaviours and waste management. This limited evidence argues for developing further research on this causation, in particular on the ways happiness may be conducive to waste prevention.

EXPLANATION 2:

WASTE MANAGEMENT AND SUSTAINABLE BEHAVIOURS INDUCE HAPPINESS IN PEOPLE

Sustainable behaviours such as waste prevention and management may be conducive to happiness: an increase in happiness may be the consequence – and not the cause as discussed above – of waste prevention and sustainable behaviours.

Individuals who engage in waste management may experience boosts in both affective and evaluative forms of happiness as the very result of their sustainable behaviours.³⁶ The literature on voluntary simplicity provides abundant illustrations of persons who, by virtue of engaging in simpler lives, experience increased feelings of satisfaction and meaning. In other words: less stuff = more happiness.³⁷

The first evidence surfaced in the beginning of the 1970s, when researchers conducted a survey among the first voluntary simplifiers; that is, people who consume less, spend less, reduce their ecological footprint, and are more community oriented.³⁸ The testimonies of these early simplifiers show that they choose simplicity because it satisfies their psychological needs: they feel more autonomous, competent, and socially related.

A study conducted in 14 Chinese cities shows that individuals who display sustainable motivations and patterns of consumption directed at reducing waste

and saving energy score higher on life satisfaction than individuals who are mildly or not engaged in green behaviours.³⁹ In addition, sustainable behaviours taken generally provide psychological rewards such as positive emotions or higher satisfaction with life.⁴⁰ Some of the participants in the zero-waste project in Denmark report an increase in happiness and link this effect to the goal of reducing waste embodied in the project.

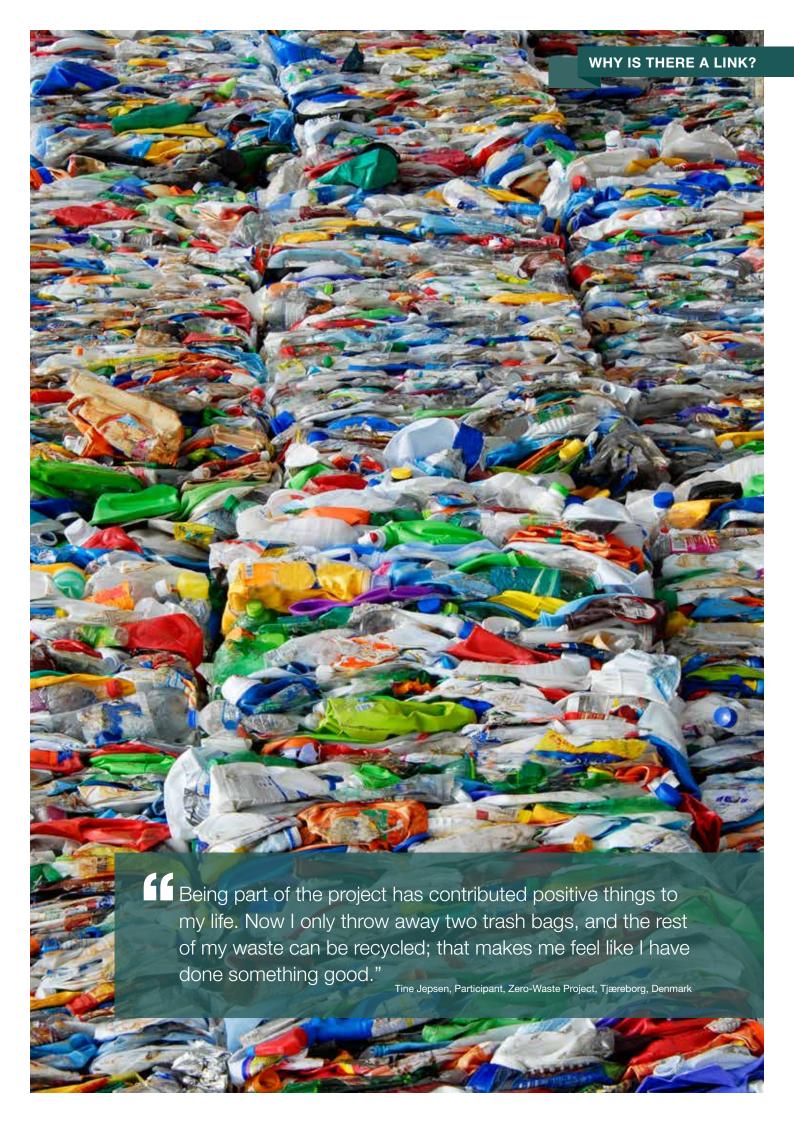
You could say that being part of this project has increased my satisfaction with life."

Helle Illum Aagaard, Participant, Zero-Waste Project, Tversted, Denmark

The next question: Why? Why would people experience an increase in happiness by living less wasteful, simpler, or more sustainable lives? May we derive inherent benefits in terms of well-being and happiness through reducing trash and recycling?

The answer could be yes. This view is supported by studies finding that producing less waste has positive effects on both life and domain satisfaction.⁴¹ A pioneering study about the small holding movement in Canada showed that individuals derived high satisfaction from their simple living (including low consumption and waste production) because it increased their feeling of self-reliance.⁴²

Another explanation may be found in the field of evolutionary psychology. In this view, our brains are hardwired to produce a sense of pleasure and well-being when we engage in activities that ensure



People behave the way they do, largely, because they associate positive consequences with their acting ... and ... sustainable behaviours produce significant psychological benefits to individuals that practice it."

Víctor Corral Verdugo, "The Positive Psychology of Sustainability," 2012

the survival of the individual and the species – for instance, eating and having sex.⁴³ We are also rewarded in our sense of well-being by helping others, the so-called "helper's high." Engaging in actions that guarantee individual and collective survival, which is the basis of waste prevention, may trigger that mechanism and provide a boost in mood.

However, as noted earlier, different dimensions of happiness coexist. And while a boost in mood – the affective dimension of happiness – might be trigged by some actions, it may not necessarily result in an increase of the evaluative happiness dimension in which we make a cognitive evaluation of our lives. Waste prevention and sustainable behaviours also cause happiness through a sense of individual accomplishment or purpose in life as tied to an individual's own situation and motivations and his or her relation to others and the environment.

TEACHING SUSTAINABLE HAPPINESS

Dr. Catherine O'Brien is a professor at Cape Breton University, where she teaches a course on sustainable happiness that explores positive psychology, happiness, sustainability, and education. Throughout the course, she strives to assist students in making the connection between their own happiness, the happiness of others, and the natural environment. By the end of the 12-week program, students are required to complete a sustainable happiness project. The project has to contribute to individual, community, and global well-being in the spirit of sustainability. Many of the students choose to do a project that leads to waste prevention in one way or another.

Research demonstrates that waste management and sustainable behaviours may favour the individual sense of competence, under certain conditions. People are more likely to engage in environmentally sustainable behaviours, and thereby enhance their happiness, if they feel competent – if they learn beforehand how to recycle, plant their own food, effectively reduce their waste, and so on.⁴⁴ Furthermore, some projects also result in tangible economic benefits, which, in turn, increases happiness and the motivation for undertaking similar projects in the future. In other words, there is a virtuous circle at work.

SEVERAL DIMENSIONS OF HAPPINESS

The psychological benefits of waste prevention and management do not stop at positive feelings and satisfaction. They also seem to imply eudaimonic rewards (that is, an experience of flourishing) in the form of an increased sense of independence and control over one's life. In other words, lifestyles that place less pressure on the environment, especially in the form of reduced waste, generate different positive psychological effects.

Even if the positive effects of waste prevention *per* se may be difficult to disentangle from the positive effects of being motivated by environmental concerns, such an effect can still be isolated in the scientific literature and interviews: people derive happiness not only from the motivations that lead them to manage their waste but from waste-reducing activities. And there is space for conducting larger studies in Denmark on the intrinsic effects of waste prevention on both evaluative and affective happiness – positive feelings, satisfaction, flourishing, and sense of purpose.

Furthermore, there is also a need to shed light on the possible two directions of causality: What is cause? And what is effect? The obvious way to try to disentangle the causality is to use longitudinal studies and follow the same group of individuals over time.

People are interested in happiness, and they are intrigued by the concept of sustainable happiness. In my experience, when people are introduced to sustainable happiness they are inspired to engage in more sustainable behaviour for their own intrinsic reasons, which may become reinforced by extrinsic factors."

Catherine O'Brien, Professor, Cape Breton University

However, one should note that explanations 1 and 2 can coexist. If both explanations are proven valid, what we are witnessing is a positive spiral between happiness and sustainable behaviours.

EXPLANATION 3:

WASTE MANAGEMENT AND SUSTAINABLE BEHAVIOURS IMPROVE THE ENVIRONMENT AND CIVIL SOCIETY, WHICH INCREASES HAPPINESS.

A third explanation could be that the consequences of sustainable behaviours in general and waste prevention in particular improve the environment and social relationships, which indirectly increases happiness.

Sustainable behaviours such as waste prevention and management have concrete positive outcomes. At the collective level, waste prevention means less waste to collect, handle, and store. That saves a community money, which means more money is available for other priorities like education, health, and public equipment.

The quality of the environment is also improved, since there are less dumping grounds and fewer illegal landfills. The environment is cleaner, and the risk that waste disrupts nature is lower. For instance, one may observe nature and wildlife more easily, without the inconvenience of a soiled natural site nearby.

The general benefits of waste prevention include a greener environment, which have positive effects on the happiness and well-being at the community level. 46 This would also explain the overlap between countries with consistently high levels of subjective well-being and ambitious environmental policies – such as the Nordic countries. Several studies support

the hypothesis linking green spaces to increased quality of life.⁴⁷

SECURITY AND RESILIENCE AS PUBLIC GOODS

The human need for security from natural disasters, food and water scarcity, and poor air quality are all jeopardized by global warming. Living more sustainably by reducing one's waste and ecological footprint can help limit global warming and the negative consequences of climate change on the environment. At the end of the day, sustainable behaviours contribute to a safer world in the future.

On this topic, research has shown that ecological degradation can interfere with basic psychological needs, such as the need for security or autonomy,⁴⁸ which are crucial in determining the extent to which people will thrive, flourish, and be psychologically balanced. If the satisfaction of these needs is compromised through ecological degradation, or enhanced through greater ecological sustainability, an individual's level of well-being is either undermined or enhanced.⁴⁹

However, a collectively reduced ecological footprint might not be noticed at an individual level. But waste prevention also carries more tangible effects: less product packaging, more durable housing materials, re-using products, donating products that are not used anymore (instead of throwing them away), reducing hazardous components, using materials more efficiently, and eliminating unnecessary items, along with recycling and composting of organic waste. ⁵⁰ Those actions come with a variety of benefits, and may all have a discernable influence on an individual's happiness.



Even though it is still a young project, I already have a stronger sense of community in the village. You start talking to people whom you have never talked to before. This has added to my happiness. There were a couple of families who lobbied to have the Zero-Waste Project start here – because they knew the sense of community it would bring with it. It is very important to feel that we are part of something bigger than ourselves. If you imagine a program where you would simply get four extra trash cans to sort your trash ... and there is no sense of community, I'm not sure you would get the same quality of life out of it as we have gotten."

Ulla Borup Guntofte, Participant, Zero-Waste Project, Tversted, Denmark

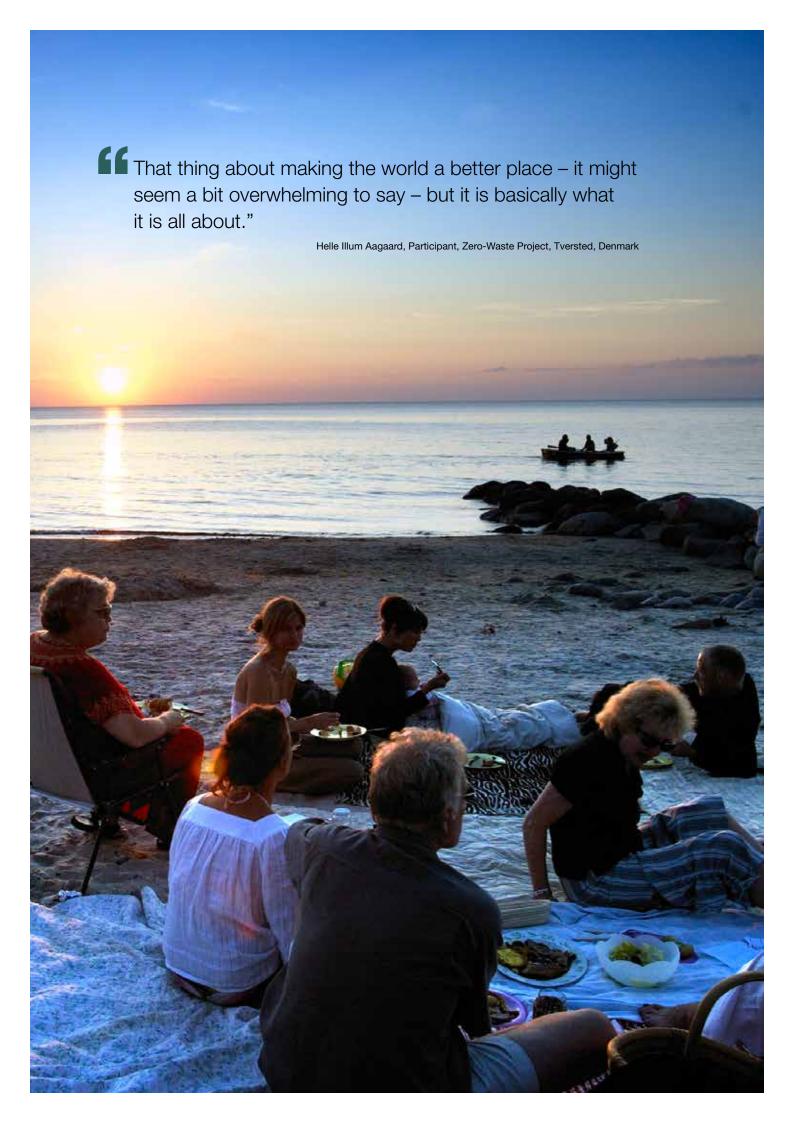
For instance, less consumption, more efficient use of electricity or water, or more durable products means more resources that could be freed for happiness-conducive consumption. An increase in the efficiency of consumed products could also lead to a reduction of work (due to a decreased pressure to consume), which may mean less stress, more meaningful activities, and improved mental health. An especially noticeable effect is the increase in the time spent with relatives and friends, which is known to be a strong happiness-enhancer.⁵¹

Moreover, a greener environment, more control over one's consumption, and more efficient use of resources will improve resilience. The benefits of waste prevention may be interpreted as paving the way to communities and individuals that are less vulnerable to external shocks (economic downturn, rise in the price of commodities, environmental crisis) and more self-sufficient. Here, happiness research has shown that increased resilience leads to lower levels of depression and mental illnesses and to the satisfaction of psychological needs such as autonomy, competence, relatedness, and security.⁵²

A STRONGER CIVIL SOCIETY

The benefits of waste prevention include a greener environment, which may result in positive effects in well-being at the community level. However, this hypothesis does not sufficiently explain why the link between happiness and sustainable behaviours, including waste prevention, exists within a group in the same community. The entire group experiences the same level of environmental quality, while those who most frequently engage in sustainable behaviours such as waste prevention still report higher levels of subjective well-being. What might explain this? One explanation could stem from another side effect of sustainable behaviours and waste management – besides greater environmental quality, which everybody benefits from, even those not taking any of these actions – namely, an improvement in the social network of the individual engaging in sustainable activities.

One of the strongest predictors of happiness is the quality of a person's social relationships. Increased socialisation means an increased chance of being happy, due to the inclusion in social networks and the contagion of happiness through networks.⁵³ This area of happiness research, captured under the expression of "relational goods,"⁵⁴ has even led to monetary evaluations. A study undertaken in the United Kingdom estimated that an increase in social involvements may produce an increase of life satisfaction equivalent to an extra 85,000 British pounds a year.⁵⁵



The case studies of the zero-waste projects in Denmark supports the hypothesis of the indirect link between the waste reduction project and happiness – via an improvement in social relations and a stronger community feeling.

In this view, sustainable behaviours support an individual's feeling of being socially connected and part of a community. Involvement with local projects, such as the zero-waste projects or Ren By Aarhus, enhances the sense of community, connection, and relatedness, which are essential psychological needs for human happiness.

Recent studies have pointed to a more general determinant of happiness that could capture this quality of social links, and could also be a driving force to encourage waste management and sustainable behaviours: social capital.⁵⁶ For example, a large study based on Canadian data has affirmed the importance of social capital – trust, obligations, social relatedness, and norms – for happiness.⁵⁷

The direction and nature of the connection between social capital and sustainable behaviours needs to be further analysed, in particular for waste management, since some aspects of social capital are clearly favourable to sustainable behaviours, while the impact of others are mixed.⁵⁸

To sum up, waste management and sustainable behaviours may indeed lead to an increase in happiness within a community (even if this may be indirect, through an increase in the quality of the local environment and civil society) which subsequently causes an increase in people's subjective well-being.

This third explanation points to the lack of studies on the influence of public goods on happiness. If the impact of public "bads" on happiness has been adequately documented, it is not the case for public goods. ⁵⁹ There is a need for studies that investigate the effect of waste disposal, prevention, and management on health, economic well-being, and happiness.

EXPLANATION 4:

HAPPINESS AND SUSTAINABLE BEHAVIOURS, INCLUDING WASTE MANAGEMENT, ARE CAUSED BY A THIRD FACTOR.

A fourth explanation is that the two dimensions could be connected by a third factor, which influences both. Let's explore what could be the cause of both happiness and sustainable behaviours, including waste management.

This third factor can have several origins. Nevertheless, the literature in psychology and sustainability pinpoints two determinants: concerns for others (often identified with altruism) and environmental concerns. ⁶⁰ The influence of environmental concerns on waste management seems obvious. Actually, it is difficult to see how individuals who care about the environment could not be motivated by managing their waste. In addition, evidence mentioned above supports the correlation between environmental concerns and happiness. But, and it is our message here, such a correlation deserves further study. Here, Denmark could play a leading role.

ALTRUISM

Individuals are not only motivated by self-interest and their own well-being, or by environmental concerns and values, but also by the interests and well-being of other people – relatives, friends, co-workers, or even people they've never met. In short, they are moved by altruistic motivations, which may induce both sustainable behaviours, including waste prevention, and happiness.

Altruism in various forms (generosity, compassion, love, and charity) generates higher levels of happiness (along with health).⁶¹ Pro-social spending behaviour has been shown to correlate to happiness. Studies demonstrate a positive effect on life satisfaction when spending on others.⁶²

Individuals who volunteer are happier than those who do not, even after controlling for other factors such as socioeconomic status.⁶³ Altruistic people

The \$64,000 question right now, is, does affect proceed behaviour, or does it follow it? The simple answer is that is can do both."

Raymond de Young, Professor, Environmental Psychology, University of Michigan

experience a higher life satisfaction, less depressive symptoms, less anxiety, and a more meaningful life. At the end of the day, they live longer and happier.⁶⁴ The enhancing impact of altruistic motivations on positive emotions has also been documented for the elderly, even when they can no longer volunteer.⁶⁵ At the same time, altruism is also conducive to environmentally responsible behaviours.⁶⁶ Hence, the more individuals have altruistic values, the more likely they are to engage in environment-friendly behaviours.⁶⁷

Conversely, studies show that anti-environmental behaviours, most notably wasteful ones, are correlated to anti-social behaviours such as violence, stealing, or cheating. For instance, a study carried out in Mexico demonstrated a correlation between anti-social behaviours and wasteful water practices. 68 This supports the idea that anti-altruistic and wasteful behaviours correlate. Moreover, it may suggest that the behaviours share motives, or that they are even the same behaviours. 69

In sum, ample research demonstrates that altruistic motives may be linked to both happiness and sustainable behaviours. The high levels of subjective well-being and the tendency to engage in sustainable behaviours may not be directly linked, but appear paired because of a common, third, factor that has the shape of an altruistic trait.

Saying that one causes the other would be as wrong as saying that eating ice cream causes drowning because as ice cream sales increase the rate of drowning deaths increases at the same time. The two are only connected by the fact that both swimming and ice cream consumption increases manifold over the summer

As a sub-category of sustainable behaviours, it is highly probable that waste management displays the same correlation with an underlying variable such as altruism. This is potentially a fruitful avenue for future research: investigating the determinants of waste management behaviours and their potential specificity in relation to the larger category of sustainable behaviours. If one considers the current challenge and threat posed by waste, the priority seems to be identification of variables that cause both waste prevention and happiness.

WE HAVE SEEN THAT THERE IS EVIDENCE SUPPORTING ALL FOUR EXPLANATIONS. AND, IN FACT, ALL FOUR HYPOTHESES CAN COEXIST.

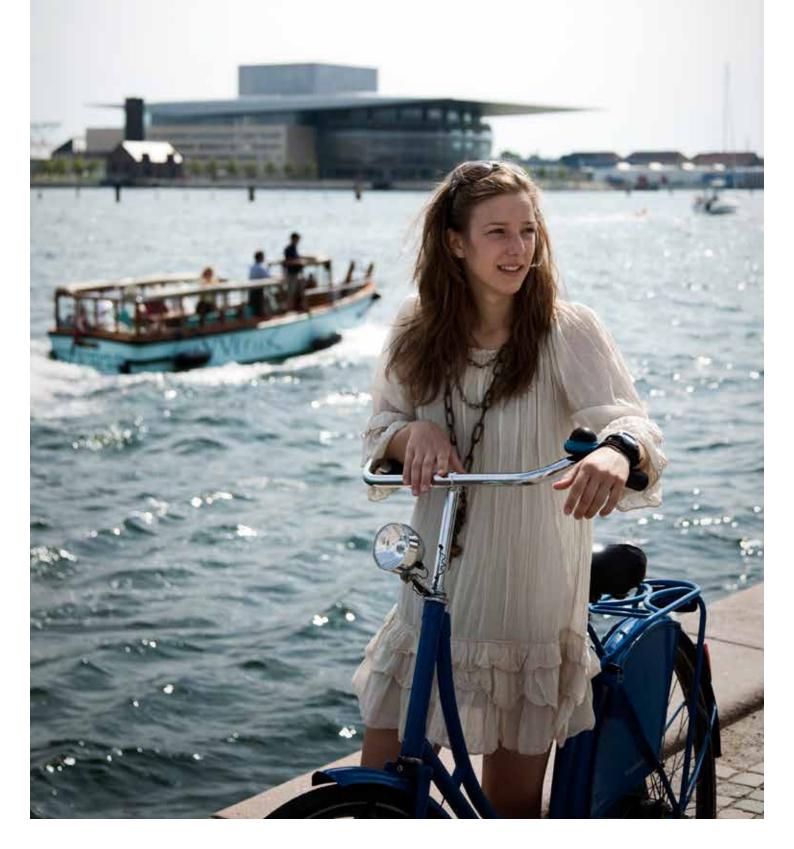
- **1.** Happy people may be more likely to engage in waste management and sustainable behaviours, while ...
- 2. Waste management and sustainable behaviours may cause an increase in happiness in a direct manner, while ...
- 3. Waste management and sustainable behaviours may also cause an increase in the quality of the environment and civil society, which subsequently leads to an improvement in quality of life, while ...
- 4. Personal traits such as environmental concerns or altruism can cause a tendency to engage in sustainable activities, and altruistic individuals report higher levels of well-being.

In fact, we find it likely that this is the case. In the next chapter, we examine what this means for policy.



The important fact is that the connection between acting sustainably and happiness seems to be established and environmental psychologists and educators may take advantage of it in their interventional strategies."

Victor Corral-Verdugo et al, (2012) "Happiness as Correlate of Sustainable behaviours"



WHAT DOES IT MEAN FOR POLICY?

In this chapter, we discuss the implications for policymakers of the evidence presented in previous chapters. We believe that general and specific policies can make a difference in promoting sustainable behaviours, including waste management and prevention, and better and happier lives.

WE PROPOSE A SERIES OF CONCRETE STEPS THAT COULD ENHANCE WASTE MANAGEMENT AND HAPPINESS:

- Highlight the close link between waste prevention (and sustainable behaviours) and happiness
- Use waste management and sustainability projects as drivers for community spirit and vitality
- Moderate excessive materialism through happiness
- Nurture basic psychological needs
- Incorporate subjective well-being when designing and evaluating policy measures
- · Add happiness as a goal of public policy

HIGHLIGHT THE CLOSE LINK BETWEEN WASTE PREVENTION (AND SUSTAINABLE BEHAVIOURS) AND HAPPINESS

In the previous chapter, explanation 2 pointed out that sustainable behaviours in general and waste management in particular induces happiness in people. This notion holds the potential to use happiness as a motivator.

The connection could be emphasized in environmental education in schools and in civil society. If environmental discourse is changed to include happiness research, the environment versus economy debate could be reframed, with focus shifted from the pursuit of pure economic growth to increased levels of subjective well-being.

In addition, the model presented in this report may be used as a tool when considering how different groups can be motivated to engage in waste management and other sustainable behaviours.

For instance, some people may be motivated by the potential effect sustainable behaviours can have on their subjective well-being; others may be more motivated by the fact that engaging in sustainability projects improves social relations in the community and strengthens civil society; still others may be made more open to waste reduction by increasing their overall life satisfaction.

However, one should consider how directly this should be communicated. "Recycle – and become happy" would probably not be the right campaign slogan.

I see a potential in happiness when it comes to the reduction of waste. Motivating people by increasing their quality of life."

Thomas Dyrmann Winkel, Industrial Ph.D.-stud., (Affaldsselskabet Vendsyssel Vest) I would be pretty hesitant to lead with the idea 'Recycle, it'll make you happier.' I think the better message would be something like 'Recycle, it makes you feel connected to something bigger than you, and that will make you feel happier.' Or 'Recycle, it promotes the health of the world, and that will make you happier.'"

Tim Kasser, Professor of Psychology, Knox College

The connection to be emphasized is more likely to be the importance of reducing one's own waste. Of course, as we highlighted in previous chapters, waste management and sustainable behaviours do have a positive impact on affective happiness: people do feel better when they look after their trash and when they reduce their consumption. But this is not the whole story. Evaluative happiness is positively impacted, too. People also increase their sense of life purpose. They nurture basic psychological needs. They increase their sense of security because they contribute to a more reliable future. They become more autonomous by decreasing their dependence on non-necessary consumption or a high volume of discarded goods. They feel more socially connected insofar as waste management becomes a community matter. And, finally, they feel competent by committing themselves to waste management.

In sum, an ambitious policy of waste management needs to stress the benefits of subjective well-being; that is, "feeling well," as well as the benefits of human flourishing, or "functioning well." These two benefits could be powerful motivators that would increase support for, and the success of, waste management policies in Denmark.

It helps me feel better about being a consumer in this society, since I, at the same time, contribute towards a better environment by not creating excessive amounts of waste."

Tine Jepsen, Participant, Zero-Waste Project, Tjæreborg, Denmark

USE WASTE MANAGEMENT AND SUSTAIN-ABILITY PROJECTS AS DRIVERS FOR COMMUNITY SPIRIT AND VITALITY

Explanation 3 pointed out that waste management and sustainable activities can lead to an improvement in community spirit and the social network. Since waste management is a collective activity, and should be carried at out at the community level in order to be efficient, it implies that sustainability projects, including waste reduction, must be thoroughly thought through and integrated into local communities.

The sense of community that is built around the project is a major motivation; a short trip to the grocery store can easily take over an hour now that I know more people."

Heidi Nielsen, Participant, Zero-Waste Project, Tversted, Denmark

This focus on the importance of community for implementing and succeeding in the implementation of sustainable behaviours could have an additional advantage: adding to the existing social net of rural areas. As one of the main challenges facing industrialized societies is to counteract rural flight and keep people as well as public services in the countryside, waste management and sustainability projects with a happiness component may be used to help achieve this goal. At the same time, this opportunity also can motivate groups in rural communities to initiate projects focusing on waste prevention.

There are several ways to do so. Waste management projects could be used to create social ties among people already living in a given area. Learning how to reduce trash, and how to consume more sustainably, may become an important source of interpersonal exchanges and a new way to appreciate human relations, even within families. In Aarhus, this is illustrated through the "We walk an extra mile for a cleaner Aarhus" initiative, under which residents can freely access information about the 250 volunteer trash collectors in the city, and see where there are individuals, groups, or pairs picking up trash in their neighbourhood and join the program when and where it suits them.

One specific example is that of a retired woman who wanted to contribute to the environment and her community. She signed up for her own trash collection route. An attraction for her was the fact that the program would enable her to join a network of 250 like-minded volunteers, thereby gaining new acquaintances and friends.

Another tool could be to use waste management projects as an integration programme for newcomers in a given area. They may find in waste management networks support groups for socializing and getting integrated into the community. Also, central, regional, and local authorities may favour the creation of communities that are based on sustainability and waste management. Happiness gains in such communities could be a powerful argument used to convince people to "move in."

Finally, projects could be useful in attracting newcomers by emphasizing the gain in the quality of life implied by sustainable behaviours. Sustainability may contribute to positive branding in regions that otherwise might suffer from an image deficit. Happiness could become a central part of this branding, utilized in public communication or advertisements.

MODERATE EXCESSIVE MATERIALISM THROUGH HAPPINESS

Explanation 4 pointed out that happiness and waste management may both be caused by a third factor in the form of values such as altruism and non-materialism. Therefore, an increase in awareness of the causes of happiness – such as social relationships,

meaning, altruism, autonomy, and competence – may reduce the misperception of the link between happiness and material things.

To that point, policies that promote waste management represent an opportunity to communicate about the fundamental dimensions of life satisfaction and quality of life. By underscoring the common determinants to happiness and waste prevention – namely the basic psychological needs such as security, autonomy, competence, and relatedness – institutions may promote a greener environment and the conditions for a better life.

As an illustration, an increasing number of schools and universities around the world are already teaching courses in happiness. The Greater Good Science Center, based at University of California, Berkeley, teaches skills that foster a thriving, resilient, and compassionate society. Stanford University and the London School of Economics now have subjects like "Happiness Economics" on the curriculum. In fact, happiness studies have been one of the most popular courses at Harvard University, and several of the world's leading universities are developing courses and training in happiness.

A central initiative is Professor O'Brien's sustainability project. The objective is to take happiness to "a new level" by articulating a holistic view of happiness training that combines the benefits for the individual, society, and the environment.

Sustainable happiness offers a fresh approach to happiness, one that invites reflection on sustainability issues, coupled with opportunities to enhance quality of life and contribute to individual, community, and global well-being.⁷¹

The initiatives in higher education show two things. First, there is an increasing demand from the population for happiness content. People want to know more about the nature and determinants of happiness. Second, it also means that these courses, along with other training programmes and materials, could contribute to raising awareness of the necessary conditions to lead a happier and better life. This may in turn motivate some groups of people to consume less and reduce waste.

People who are happy don't necessarily engage in environmentally friendly behaviour automatically. I believe that it depends on how you have been socialized. You could be very happy, and you could still be not aware of your impact on other people and the natural environment, if you have been socialized that way. But I think that once people do make the connection, that their happiness and well-being is interconnected with other people, then it creates a paradigm shift. And that helps sustain the sustainable behaviour."

Catherine O'Brien, Professor, Cape Breton University

NURTURE BASIC PSYCHOLOGICAL NEEDS

Happiness research offers evidence that waste management and sustainable behaviours depend on, and are conducive to, the fulfilment of basic psychological needs. Individuals need to feel secure, autonomous, socially related, and competent in their daily lives.⁷²

The importance of these psychological needs should be taken into account in the design of public policies because it could determine the success or failure of such policies.

We are trying to angle all our projects in Ren By Aarhus in a way that includes nurturing all the basic psychological needs, so people get rewarded with that positive feeling of happiness and meaning when partaking in the different projects."

Pernille Thormann Villesen, Project Manager, Ren By Aarhus (Clean City Aarhus) For instance, it is known that individuals become reluctant to undertake sustainable behaviours if they do not feel competent to do so – if they don't know the exact procedure, or if they are afraid to make mistakes. Not feeling competent quickly develops into feelings of helplessness, which are deeply upsetting or depressing feelings.⁷³

Individuals also need to feel autonomous when undertaking sustainable activities. The control and command dimension of waste management policies should be reduced. Individuals should feel that they are the main actors of the change they bring in their lives, in terms of more sustainable activities and reduction of trash.

Therefore, the challenge becomes inducing people to act in certain ways without forcing them to do so. A way to do this is through the so-called "architecture of choice" or "nudging"; that is, the choices available to individuals may be altered to favour more sustainable outcomes.⁷⁴

Attention to basic psychological needs may also be valuable when it comes to motivating different people to reduce waste. Individuals should feel autonomous, competent, and socially related when they manage their waste. The very activity of reducing their waste should be carried on in a manner that will maximize the satisfaction of basic psychological needs at the core of a better life. Such considerations must be addressed from the start, during the elaboration of public policies, which cover the communication of



We don't know for sure whether engaging in positive environmental behaviours makes people happy or happy people like to engage in more positive environmental behaviours. Even if it is that happy people are more likely to engage in positive environmental behaviours, at least you are off to a better start than if such behaviours are *not* associated with happiness. And even if the correlation is due to the fact that happy people recycle more, then take advantage of that, and figure out how can we get happy people to be even more pro-environmental, and how can we support pro-environmental behaviours even more among this group."

Tim Kasser, Professor of Psychology, Knox College

waste management goals and procedures, the community settings where waste management should take place, and the participation of individuals in the whole process.

A concrete example is the Tværsted Zero-Waste Project, which has made autonomy a core component of the initiative. This is considered one explanation for the success of the initiative.

INCORPORATE SUBJECTIVE WELL-BEING WHEN DESIGNING AND EVALUATING POLICY MEASURES

Measures of subjective well-being provide a robust empirical source of information on how different circumstances affect people's lives. By examining how the level of subjective well-being is affected by different policies, frameworks, and approaches, political decision-makers may improve their understanding of what matters to citizens based on empirical, rather than anecdotal, evidence. They may also better understand the subtle ways in which public decision-making affects people's lives.

Therefore, to assist government decision-making processes, including the allocation of resources

and the design of environmental policies, subjective well-being data and findings should be pursued. It can be used to highlight areas of policy with the greatest potential to improve subjective well-being of the general population or of sub-categories, how environmental changes affecting society will have an impact on quality of life, and the circumstances most likely to put public subjective well-being at risk. This would provide an alternative to traditional economic approaches to estimating the value of non-market goods, supporting governments in making decisions about complex social and environmental choices. In short, there is room for developing happiness and well-being indicators in Denmark.

ADD HAPPINESS AS ONE OF THE GOALS OF PUBLIC POLICIES

In the previous chapter, explanation 1 revealed that happier people are more likely to engage in sustainable behaviours such as waste prevention and management. There is, therefore, the potential to induce sustainable action by increasing the general subjective well-being of the citizens. This is a lever that could be used by institutions to pursue the goal of more sustainable societies.

We are starting to realize that if you want people to participate in waste management initiatives, you have to make them see the greater meaning of it; it is no longer enough that Peter from the city council tells them that they have to do it."

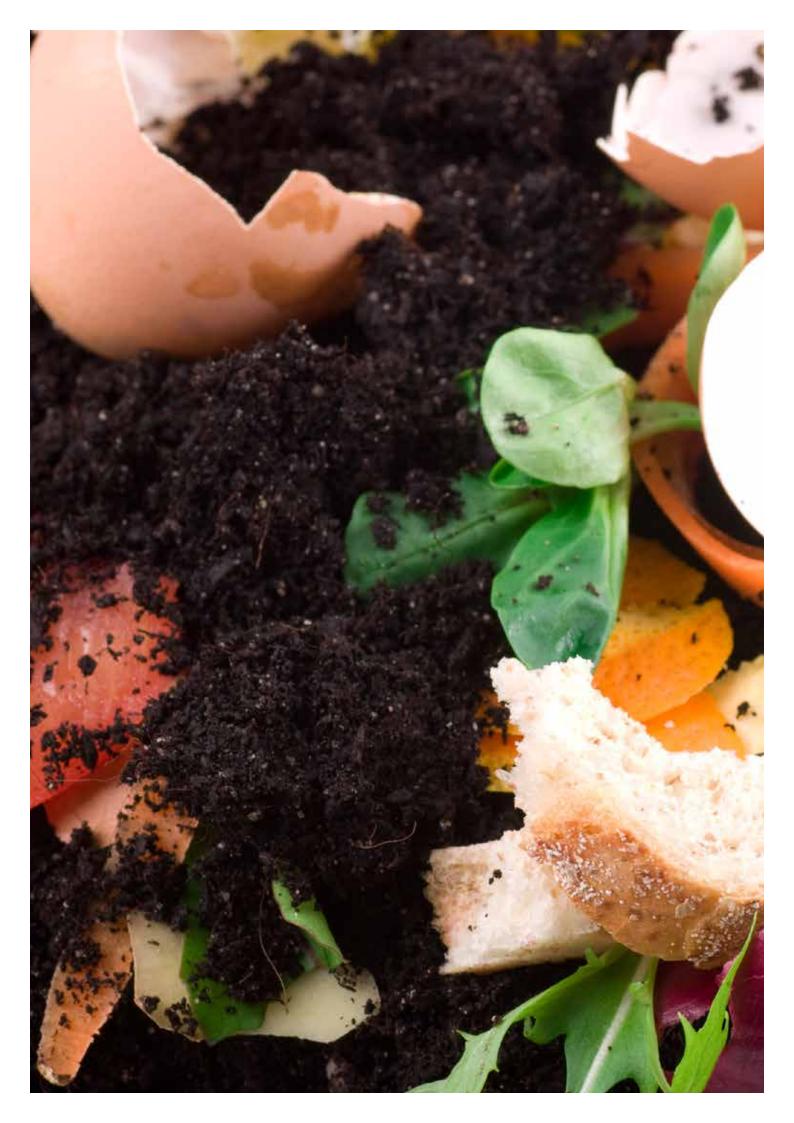
Niels Remtoft, Special Consultant, Danish Waste Association

Last year, the Happiness Research Institute published the report "The Happy Danes – Exploring the Reasons for the High Levels of Happiness in Denmark," which stated that: "It is time for a worldwide debate about what countries can do to raise the happiness levels of their people...Furthermore, we should ask ourselves how we can use happiness to achieve some of the aims we have for our countries – such as a stronger and more sustainable economy, and a healthier population."

The possibility that happier people are more likely to manage their waste and act more sustainably supports this notion. By increasing quality of life, in particular subjective well-being, in our societies, we may in fact accomplish additional goals. This is one of the reasons that the World Happiness Report 2012 concludes: "It makes sense to pursue policies to raise the public's happiness as much as it does to raise the public's national income."

And even if the correlation may need more research to be fully assessed, there already exists strong grounds for the belief that promoting the conditions for happiness may create favourable conditions for waste-reduction, pro-environmental, and sustainable behaviours.

In sum, the Danish Government, and the Ministry of the Environment in particular, could play a key and pioneering role in the necessary transformation by contributing to the research on the effect of happiness on waste management and sustainable behaviours. One suggestion is to launch waste-reduction programmes and monitor the motivations and subjective well-being of individuals and families involved in such programmes. In fact, there is strong interest from several well-known researchers to contribute to such efforts. As such, Denmark could be at the vanguard of the movement towards better, more sustainable, and happier societies.



WHAT HAVE WE LEARNED?

Exploring Happiness

- Happiness is now a central topic for citizens, universities, governments, and international organizations, and can be studied in a scientific manner
- Subjective well-being data can provide an important complement to other indicators already used for monitoring countries' performance, for guiding people's choices, and for designing and delivering policies
- Happiness research is therefore an essential tool for enhancing life satisfaction and quality of life
- We are witnessing a paradigmatic shift away from GDP as the ultimate priority and moving towards
 placing quality of life and happiness at the core of public policy

2. Is There a Link Between Sustainable Behaviours and Happiness?

- Happiness and sustainability are not opposed; they are mutually reinforcing
- · Initiatives around the world evaluate and pursue the double objective of sustainability and happiness
- There is data supporting the notion that happiness is correlated with environmental concerns
- Waste management can affect both the affective and evaluative dimension of happiness

Why Is There a Link Between Sustainable Behaviours and Happiness?

- Four different hypotheses can explain the link between happiness and waste prevention:
- Happier people are more likely to engage in waste management and sustainable behaviours
- Waste management and sustainable behaviours cause happiness in people
- Waste management and sustainable behaviours improve the environment and civil society, which subsequently increases happiness
- Happiness and waste management are both caused by a third factor, namely environmental and altruistic concerns

4. What Does it Mean for Policy?

- As a result of the link between sustainable behaviours and happiness, a number of policy recommendations and concrete initiatives can be made, including:
- Highlight the close link between waste prevention (and sustainable behaviours) and happiness
- Use waste management and sustainability projects as drivers for community spirit and vitality
- Moderate excessive materialism through happiness
- Nurture basic psychological needs
- Incorporate subjective well-being when designing and evaluating policy measures
- · Add happiness as a goal of public policy



WHAT ARE THE NEXT STEPS?

Happiness research is still a discipline in its youth and many links, patterns, and dynamics are yet to be discovered and explored. There is a need for designing and implementing further projects. We would therefore like to end this report with a few suggestions for steps to be taken next.

ADDITIONAL EXPLORATION

As indicated in the report, there is a growing body of evidence on the interaction between waste management and happiness. However, the research is still new, even in comparison to happiness research. More studies are needed to determine the links of causation and the multiple interactions between happiness and sustainability in general and happiness and waste management in particular.

During interviews, all of the specialists, world-leading scholars in the field, expressed a strong interest in the steps undertaken by Denmark to reduce waste and the work done by the Happiness Research Institute to use happiness research to prevent waste. The researchers all expressed an interest in monitoring further developments, including future research projects.

In addition, by virtue of their potential to improve waste prevention, the projects outlined in these pages could be used to reinforce Denmark's image as a world leader in green energy and sustainability. Several research projects may be undertaken:

Waste prevention and happiness in different populations. This project could investigate and document how happiness and waste prevention correlate and interact within different segments of the Danish population. These segments could be demographic (e.g. age and gender), geographic, or socioeconomic. Such a study could help to strengthen the design of public waste prevention policies and campaigns. It may also be useful in determining which messages and actions are particularly effective for addressing and motivating specific groups and individuals. Furthermore, it could be used for regulation and "architecture of choice," the design of the environment in which individuals make decisions that could lead to diminishing waste.

Explore materialism as a common undermining factor to happiness and sustainability. This report has highlighted the negative influence of materialism. Materialistic values, in addition to boosting excessive and unnecessary consumption, are also responsible for undermining life satisfaction, subjective wellbeing, and happiness.76 In this context, a potential research project could target the misconceptions of the link between materialism and happiness, i.e. to explore the negative interactions between materialism and subjective well-being. A potential impact of this research could be to strengthen the case for waste prevention by revealing the adverse effects of materialism on happiness and sustainability, and to suggest concrete remedies to the power of materialism in our societies. A sub-theme could be to explore how consumption could be positively or negatively linked to happiness, depending on the degree of sustainability of consumption behaviour. Again, the evidence produced could be conducive to concrete recommendations for improving sustainable patterns of consumption among the Danish population, which will ultimately lead to reduced waste.

ESTABLISH A FOLLOW-UP PANEL ON HAPPINESS AND WASTE MANAGEMENT

Another proposition is to establish a panel study wherein a large group of individuals are surveyed over time. The group of individuals should reflect the demographic, social, and geographical composition of the Danish population, and the study would shed additional light on the cause and effect question between happiness and waste reduction.

The panel would also offer the possibility to regularly survey a sample of the Danish population through questionnaires and interviews. In addition, it would help settle issues and answer various questions, for instance:

- What are the motivations of different individuals and groups for managing their waste and acting sustainably? What are the correlations between their age, location, social category, personal values, and their behaviours?
- How is their happiness affected by their behaviours?
- How does their happiness affect their behaviours?
- How do their motivations and happiness evolve over time in relation to their achievements in managing waste and acting sustainability and why?
- How do individuals and groups react to public policies and campaigns?
- Which kinds of public actions and motivations are efficient? With which groups and individuals and why?

SET UP A HAPPINESS INDICATOR

Finally, we also believe that progress towards a happiness indicator that will encompass all of the dimensions of happiness will provide a solid basis for evaluating the variations of happiness and quality of life over time. It will not only be an additional governance tool, but also a highly valuable instrument for generating regular feedback on the subjective well-being of the Danish population.

The feedback provided by this indicator will be useful for assessing the impact of environmental, social, and economic policies on individual happiness and quality of life. It could be designed as a flexible tool for monitoring all kinds of public policies, not only sustainable or waste prevention initiatives. In other words, the future returns on the initial investment of building a happiness indicator could be large. Implementation of such an indicator seems particularly relevant in the context of Denmark – known as "the happiest country in the world" - in order to go beyond the misconceptions, approximations, and the superficiality of this image. In other words, an indicator would help to forge a more fine-grained view of what constitutes Danish quality of life, how such quality of life evolves over time, and how an increase in quality of life is feasible.

As our understanding of what drives happiness grows, we may decouple the link between consumption and happiness - and thus put the world on a more sustainable path."

Meik Wiking, CEO, The Happiness Research Institute



ABSTRACT IN DANISH

International forskning peger på en sammenhæng mellem livstilfredshed og bæredygtig adfærd, idet folk, der agerer bæredygtigt, rapporterer højere niveauer af livstilfredshed. Rapporten Sustainable Happiness – Why Waste Prevention May Lead to an Increase in Quality of Life søger at forklare denne sammenhæng.

LYKKE ER PÅ DEN GLOBALE DAGORDEN

Rapporten tager udgangspunkt i det politiske og akademiske fundament, som lykkeforskningen har opbygget i de seneste år. Eksempelvis har FN vedtaget en resolution om lykke, der opfordrer alle verdens lande til at sætte større fokus på lykke, og arbejde aktivt på at øge livstilfredsheden blandt deres borgere. Det skyldes blandt andet en øget erkendelse af, at lykkeforskning og lykkemålinger ifølge OECD er valide og pålidelige, og kan anvendes til at udvikle og guide politik.

Samtidig arbejder en række akademiske institutioner som London School of Economics, Harvard University, og Københavns Universitet med lykkeforskning, og derved har man blandt andet opnået øget viden om, hvordan forskellige faktorer som velstand, sundhed, tryghed, og fællesskab påvirker folks livskvalitet, lykke, og tilfredshed med livet.

EN SAMMENHÆNG MELLEM LYKKE OG BÆREDYGTIGHED

Internationale undersøgelser peger samtidig på en sammenhæng mellem livstilfredshed og bæredygtig adfærd, idet folk, der lever bæredygtige liv generelt rapporterer, at de er lykkeligere end folk, der ikke lever bæredygtigt. Figuren til højre er et eksempel på dette og en voksende mænge data og undersøgelser i stil hermed viser, at bæredygtig adfærd, herunder affaldsforebyggelse, hænger sammen med lykke og velvære hos folk.

Ud over den internationale forskning på området bygger rapporten også på interviews med eksperter og personer, der har indgået i forskellige projekter for at reducere deres affaldsmængde. De forskellige elementer understøtter tesen om sammenhængen mellem lykke og bæredygtig adfærd herunder affaldsforebyggelse. Eksempelvis udtaler en af deltagerne fra
et nulskraldsprojekt i Tversted: "Hvis du havde spurgt
mig, før vi gik i gang om jeg ville blive lykkeligere, så
havde jeg nok været en smule skeptisk, men sådan
har jeg det faktisk når jeg snyder skraldespanden for
skrald, og det er jo en stor form for velvære."

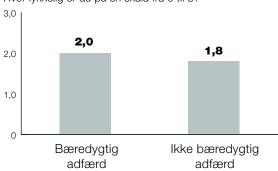
FORSKELLIGE FORKLARINGER PÅ SAMMENHÆNGEN

Mens forskellige akademiske studier peger på sammenhængen mellem lykke og bæredygtig adfærd, er der forskellige teorier om, *hvorfor* denne sammenhæng optræder. Altså hvad der er årsag og hvad der er effekt. Rapporten peger på fire mulige forklaringer.

For det første kan sammenhængen skyldes, at lykkelige mennesker er mere tilbøjelige til at reducere deres affaldsforbrug. Mentalt overskud kan betyde, at folk kerer sig mere om deres omgivelser og handler i overensstemmelse hermed.

Lvkkeniveau

Hvor lykkelig er du på en skala fra 0 til 3?



Folk, der udviser bæredygtig adfærd, rapporterer højere lykkeniveauer

For det andet kan sammenhængen også skyldes den omvendte effekt – altså at bæredygtig adfærd er en årsag til – og ikke en konsekvens af - større tilfredshed med livet. Folk opnår simpelthen større livstilfredshed ved at engagere sig i bæredygtig adfærd.

Sammenhængen kan dog også være indirekte, og en tredje forklaring lyder derfor på, at en reduktion af affaldsforbruget eksempelvis via involvering i nulskraldsprojekter skaber bedre omgivelser i form af skønnere natur og et styrket lokalfællesskab – der leder til større trivsel blandt folk. Dermed er det ikke handlingerne i sig selv, der øger livstilfredsheden, men derimod konsekvenserne af folks handlinger der indirekte fører til større tilfredshed med livet.

Den fjerde forklaring tager udgangspunkt i, at lykke og affaldsforebyggelse begge påvirkes af en tredje bagvedliggende faktor. Eksempelvis kan medmenneskelige personlighedstræk både lede til, at en person er lykkeligere og samtidig lever mere bæredygtigt eksempelvis ved at reducere sit affaldsforbrug.

De fire forklaringer udelukker ikke hinanden, og der er forskning, der understøtter de forskellige hypoteser; derfor peger rapporten på, at samtlige forklaringsmodeller sandsynligvis er på spil samtidigt. Lykkelige mennesker er mere tilbøjelige til at engagere sig i affaldsforebyggelse og samtidig resulterer bæredygtig adfærd i større livstilfredshed – både som en direkte effekt samt en indirekte effekt via en forbedring af lokalmiljøet og civilsamfundet, mens der eksisterer karaktertræk, der er fremmende for livstilfredshed samt forebyggelse af affald.

ET LYKKELIGT POTENTIALE

Rapporten peger på, at forskningen inden for lykke, livskvalitet og tilfredshed med livet med fordel kan anvendes mere aktivt i miljøpolitikken, herunder i forbindelse med projekter om forebyggelse af affald. Der peges på en række generelle og specifikke anbefalinger, der kan understøtte bæredygtig adfærd og fremme det gode liv i Danmark, herunder at inddrage effekten på livskvalitet i udarbejdelsen og evalueringen af politiske tiltag.

Rapporten gør også op med en forståelse af, at der skulle eksistere et modsætningsforhold mellem bæredygtighed og livskvalitet, og anbefaler en fremhævning af sammenhængen mellem bæredygtig adfærd og lykke – blandt andet gennem undervisning i skoler og i civilsamfundet. Hvis man kan tydeliggøre de personlige gevinster af at leve mere bæredygtigt, styrker det motivationen for bæredygtig adfærd.

I forlængelse af dette kan øget indsigt og dokumentation af sammenhængen mellem livstilfredshed og faktorer som relationer, næstekærlighed og mening bidrage til en afstandtagen fra overflødig materialisme. og således biddrage til affaldsforebyggelse. Da nulskraldsprojekter samtidig viser sig at have en sidegevinst ud over at sikre større bæredygtighed - nemlig at styrke vitaliteten og fællesskabsfølelsen i et lokalområde – peges der derfor på, at bæredygtighedsprojektet har et potentiale for eksempelvis yderkommuner, der ønsker at styrke disse områder. Eksempelvis fortæller en af deltagerne i et nulskraldsprojekt, at den fællesskabsfølelse, der er opstået på grund af projektet, er en kæmpe motivation og fortæller, at en tur til købmanden nu hurtigt kan tage lang tid, fordi vedkommende møder så mange, hun kender på vejen.

Rapporten præsenterer samtidig en forklaringsmodel, der giver et overblik over de forskellige mulige sammenhænge mellem lykke og bæredygtig adfærd. Modellen kan anvendes som et værktøj, når det skal overvejes, hvordan forskellige grupper bedst kan motiveres til at reducere deres affaldsforbrug. Nogle personer motiveres bedst ved at vide, hvilken effekt bæredygtig adfærd kan have på deres livstilfredshed, mens andre motiveres til at engagere sig i eksempelvis nulskraldsprojekter på grund af forbedringen af det sociale netværk og styrkelsen af civilsamfundet, mens det hos en tredje gruppe handler om at få øget livstilfredsheden før man kan fokusere på bæredygtig adfærd.

Der er potentiale i at udforske feltet dybere ved at stille skarpt på forskellige segmenter af den danske befolkning og kortlægge sammenhængen mellem lykke og livstilfredshed på den ene side og affaldshåndtering og – forebyggelse på den anden side. Et led i denne kortlægning kunne være et panelstudie, hvor en større gruppe personer undersøges over en længere periode. Derigennem vil man få belyst årsagssammenhænge og få større klarhed over, hvorledes forskellige livsstile og ændringer i livsvilkår påvirker lykkeniveauet, samt hvorledes forskellige segmenter motiveres bedst.

OVERSIGT OVER RAPPORTENS HOVEDPOINTER

- Lykke er højt på dagordenen hos internationale organisationer som FN og OECD samt hos regeringer og universiteter som Harvard University og London School of Economics.
- Lykkemålinger og andre former for målinger af subjektiv trivsel kan anvendes til at udvikle politik og som supplerende indikatorer i forhold til at vurdere samfundets udvikling.
- Lykkeforskning kan derfor anvendes som værktøj i forhold til at øge tilfredsheden med livet og livskvaliteten blandt borgere.
- Vi er vidner til et paradigmeskift væk fra økonomisk vækst som den ultimative prioritet og i stedet integreres livskvalitet, trivsel og lykke som politiske mål.
- Lykke og bæredygtighed er ikke modsætninger, men kan styrke hinanden og flere initiativer rundt omkring i verden forfølger et dobbelt mål om bæredygtighed og lykke.
- Der er data, der understøtter tesen om, at lykke hænger sammen med miljøhensyn.
- Affaldshåndtering kan have indflydelse både på den affektive og den evaluerende lykkedimension, der dækker over, hvordan vi henholdsvis oplever og evaluerer vores liv.

- Der eksisterer fire forskellige hypoteser, der forklarer, hvorfor der eksisterer et link mellem lykke og bæredygtig adfærd herunder en reduktion i affaldsforbruget:
- 1. Lykkelige mennesker er mere tilbøjelige til at engagere sig i bæredygtig adfærd herunder affaldsforebyggelse.
- Bæredygtig adfærd resulterer i et øget niveau af livstilfredshed.
- Bæredygtig adfærd herunder affaldsforebyggelse medfører en forbedring af lokalmiljøet og lokalsamfundet, der påvirker livskvaliteten.
- 4. Livstilfredshed og bæredygtig adfærd er begge resultater af en bagvedliggende faktor eksempelvis altruistiske værdier.
- Sammenhængen mellem bæredygtig adfærd herunder affaldsforebyggelse og livstilfredshed bør synliggøres.
- Affaldsforebyggelsesprojekter kan fungere som omdrejningspunkt i forhold til at styrke fællesskab i lokalsamfundet.
- Et øget fokus på psykologiske behov og årsager til livstilfredshed kan stække overdreven materialisme.
- Subjektive trivselsmålinger herunder livstilfredshed, lykke og trivsel bør integreres i udvikling og evaluering af politik.
- Lykke, livskvalitet og tilfredshed med livet blandt borgere bør indgå som mål for samfundsudviklingen.

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