

# FUTURES CONSCIOUSNESS AND ITS IMPACTS ON THE INDIVIDUAL'S READINESS TO MAKE RADICAL POLICY CHOICES – STUDY ON FINNISH REGIME MEMBERS

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## **Abstract**

Future consciousness is typically considered an essential feature of good policy-making and a prerequisite for radical innovations and game-changing shifts in policy. The styles of future thinking have, however, rarely been studied among regime members. This paper utilises a new method to measure future consciousness and evaluates its relationship with acceptance and interest in new, radical policy shifts among individual regime members. The purpose of this paper is to find correlations between the different futures consciousness profiles and the attitudes towards new types of policies and policy shifts among regime representatives by cross-analysing three different types of data.

The data includes futures consciousness profiles and opinions of 21 Finnish regime representatives: policy makers, executives from government ministries, city majors, heads of trade unions and other interest groups and businesses. The regime representatives participated in a three part study: 1 – futures consciousness psychometric test; 2 – individual interviews on their future visions and challenges related to natural resource scarcity; and 3 – survey on the acceptability of new strong consumption household consumption policies. The participants were asked to participate as individuals and express their personal opinions. The strong consumption policies evaluated in the survey were developed based on expert interviews and a literature review. These fourteen policy measures varied from resource tax to urban planning codes and from personal consumption footprints to wage caps.

The futures consciousness psychometric test is a new, recently developed instrument for measuring the presence and impacts of future consciousness in individuals. It builds on a novel five-dimensional model of futures consciousness, which integrates theoretical thinking from futures studies with relevant psychological literature and constructs. It consists of the following psychological dimensions a) Time Perspective, b) Agency Beliefs, c) Openness to Alternatives, d) Systems Perception, and e) Concern for Others.

According to the analysis, the regime representatives formed three different groups: the radicals, the moderates and the critics. Each one of the groups has varying scores in the futures consciousness scale and their scores can partly explain their policy choices. The moderates score high in systems perception and hence they prefer policies that are in line with current, existing policies. The radicals have strong openness to alternatives and concern for others so they are more inclined towards new policies. The critics score high in openness to alternatives but low in time perspective and they are less likely to accept restrictive policies and more likely to trust that solutions will be found in the future.

The initial results provide insight on the role of futures consciousness in relation to individual's interest in supporting new policies and radical policy shifts. This, in turn, will increase our understanding on the psychological processes behind decision-making and policy choices. It also gives insight on the question of how new policies should be developed and promoted to gain wide support among different kinds of regime members.

It should be noted that the results presented in this paper are preliminary.

**Keywords:** Policy acceptability, Regime research, future(s) consciousness, sustainable consumption, strong sustainable consumption governance, future orientation

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## Introduction

This paper looks at the connection between future consciousness and acceptability of new sustainable consumption policy measures among a specific target group, Finnish regime members.

Solving many of the wicked problems of today requires understanding of their complexity as well commitment to give precedence to long-term thinking rather than short-term goal-achievement. The ability of individuals or organisations to be future-conscious has often been regarded by futurists as central in tackling these challenges. A recently developed five-dimensional futures consciousness model and scale aims to make the phenomenon empirically detectible and measure its prevalence among individuals (Ahvenharju, Minkkinen, & Lalot, 2017, 2018, n.d.). The explanatory power of that model is tested in this paper by using it to measure the futures consciousness of the regime members and comparing these results with policy acceptance.

According to the transition theory, committed and dynamic actors have a central role to play in pursuing and speeding up these transitions. They can create alternative practices, influence changes in public opinion and actively grasp opportunities within their reach. The actor's formal position, capability to influence others and personal skills are fundamental prerequisites for their ability to act as a change-agent (Grin, Rotmans, & Schot, 2011). The aim of this paper is to explore what we can find out about these potential change agents by analysing their future consciousness and policy choices.

The next sections of this paper present the methodological approach as well as results and discussion. Before that, however, the concepts of futures consciousness is explained in more detail as well as the use of acceptability of consumption policies as a proxy for readiness to make radical policy choices.

### ***Futures consciousness as a prerequisite to making good decisions***

Futures consciousness is seen as a prerequisite to good decision-making by many futurists (Masini, 1993; Polak, 1971). According to empirical research, future thinking reduces so called future discounting when future gains are disregarded over lesser gains in the near future (Bromberg, Wiehler, & Peters, 2015; Daniel, Said, Stanton, & Epstein, 2015) and consciousness of future consequences may increase societal engagement (Bruderer Enzler, 2015; Strathman & Joireman, 2005).

The recently developed futures consciousness model (Ahvenharju et al., 2017, 2018, n.d.) includes five dimensions that have been described as follows:

- **Time perspective** makes individuals aware of the way how events and their consequences follow each other as sequences over time. It allows one to understand past, present and future as well as the value of long-term thinking. Future-oriented thinking and behavior allows one to act in a way that maximizes their long-term benefits, sometimes at the cost of short-term benefits. A sense of the past is also crucial: by remembering past events, humans can better prepare for the future.
- **Agency beliefs** depicts individuals trust in their own ability to influence future events. The future is not predetermined, but instead it is the result of a complex web of interconnected

individual actions. The capacity for influencing the future through individual or collective agency may notably vary among individuals. An essential part of agency is one's capability for differentiating between the issues that cannot be influenced and those that can, and by whom.

- **Openness to alternatives** enables an individual to critically question established truths and see the possibilities what emerging changes may bring about. Openness allows to take alternative developments into account and to critically evaluate possibilities as well as what one's preferences are. It entails critical evaluation of commonly shared opinions and thoughts to discover unconventional solutions and alternative paths, as well as the capability for enduring uncertainty regarding the future.
- **Systems perception** helps individuals to see the interconnectedness between human and natural systems. It equips individuals' with an appreciation and acceptance of the complexity of the cultural, societal and environmental systems that they live in. Systemic and holistic approaches facilitate a better understanding of long-term, complex consequences of decisions as well as the potential interactions and interdependencies related to them.
- **Concern for others** steers individuals towards actions and behaviour that give a feeling of connection to something greater than oneself. It springs from the realization that in our systemic and interconnected world, the future for oneself will not be better, unless it is better for others as well. Concern for others measures the capacity for being concerned about and committing oneself to bettering the future of others, of society, and even future of generations yet unborn. It also requires the capability to take risks in advancing one's cause.

In this paper the futures consciousness of regime members is used as a tool to analyse the motivations behind the policy choices of the regime representatives.

### ***The case of strong sustainable consumption policy: acceptability of new policy measures***

In this study, the acceptability of a set of strong consumption policy measures by the regime members is used as a proxy for their readiness to make radical policy choices. Strong sustainable consumption policy measures refer to policies that would actually change current consumption patterns in ways that would reduce the total need for consumption, as opposed to weak sustainable consumption measures, which mainly concentrate on the efficiency of different modes of consumption (Lorek & Fuchs, 2013). The regime members are actors in such positions that their positive opinion would greatly advance the possibility of implementing such policies.

Natural resource consumption is one of the greatest sustainability challenges, and yet the policies to tackle the problem have been insufficient. Natural resource consumption is one of the main pressures to the carrying capacity of the planet (EEA, 2014; Wijkman & Rockström, 2012). Urgent measures are needed: within the EU, household consumption has increased nearly 25 % between 1996 and 2012 (EEA, 2014). The role of households could be incremental: according to the IEA, 42 % of the cuts needed in CO<sub>2</sub> emissions could be produced from energy saving measures by consumers (Benoit, 2013). Yet there are relatively few policies targeting private consumption, and the reductions in environmental impacts of the European economy since 1995 have been mainly due to changes in production (European Environment Agency, 2013b). The vast potential of changes in consumption patterns has not taken place.

Recent research has studied the extent of scarcity of natural resources when both global economies and populations are growing fast. According to rough estimates, Finns, as well as other

inhabitants of other developed countries, should reduce their consumption of natural resources by 70-80 %, compared to what it is today, by the year 2050 (Bringezu, 2015; Lettenmeier, Liedtke, & Rohn, 2014; UNEP, 2014). This requires notable changes to current lifestyles as well as societal organization and infrastructure. In other words, quite radical transitions would be required in the Finnish society to reach such a reduction.

Public policy can, and in many cases has already, taken an active role in advancing long-term thinking and solving wicked problems. One of the challenging areas, where more public policy has been called for, is sustainable consumption policy (European Environment Agency, 2013a; Isenhour, 2016; Mickwitz, Hilden, Seppälä, & Melanen, 2011; UN Secretary General, 2011). However, in democratic societies, all new policy initiatives require the acceptance of the regime, and eventually, the public. In a related study, the acceptability and interest in new consumption policy measures among regime members was found to be generally high (Ahvenharju, n.d.). This paper now cross-examines the acceptability of new strong sustainable consumption measures with the level of futures consciousness among the group of regime members.

### Methodological approach

The data utilised in this study includes futures consciousness profiles and opinions of 18 Finnish regime representatives: policy makers, executives from government ministries, city majors, heads of trade unions and other interest groups and businesses. The regime members were chosen according to the Table 1 covering all the main actors in the Finnish society regarding material consumption. All the contacted individuals were from strategically leading positions within their respective organisations: CEOs, board chairs or similar. Originally 32 individuals were invited, out of which 18 participated in all three parts of the study.

Table 1: Participating regime members (See also Ahvenharju, n.d.)

Sector of society	Selection principle	# participant
Parliament	All parties	3
Local government	Two cities selected by random - from 1st to 5th and 6th to 10th largest cities	2
Ministries	Ministries relevant to consumption of natural resources	3
Interest groups	Major economic and employment interest groups	4
Companies	Largest companies in the food, transport, housing and consumer product sectors	1
Science	Main policy research organisations independent of government	3
Media	Largest media companies	2

The regime representatives participated in a three part study in the following order: 1 – futures consciousness psychometric test; 2 – individual interviews on their future visions and challenges related to natural resource scarcity; and 3 – survey on the acceptability of new strong consumption household consumption policies (See also Ahvenharju, n.d.). The participants were asked to participate as individuals and express their personal opinions. They were also promised full anonymity regarding their responses, therefore the list of participant names is not available.

The futures consciousness psychometric scale (Lalot, Ahvenharju, & Minkkinen, n.d.) was carried out as a websurvey and filled in by the participants before the interviews. The scale is a 30-item survey with responses 1-5 on a Likert scale. It measures individual's futures consciousness on five main dimensions, including nine sub-dimensions:

1. Time perspective
  - a. Weighted decision-making
  - b. Consideration of future consequences (CFC)
2. Agency beliefs
3. Openness to alternatives
  - a. Critical thinking
  - b. Openness to experience (ONE)
4. Systems perception
  - a. Systemic thinking
  - b. Nature inclusiveness
5. Concern for others
  - a. Virtuous leadership
  - b. Concern for others (CFO)

The structured interviews were made face-to-face and they lasted altogether ca. 60 minutes. Part of the interview was dedicated on sustainable consumption policies. The relevant interview questions for this paper are listed below. Before the questions were presented, the interviewees were briefed about the recent research on natural resource scarcity.

- What do you think of the target to reduce 70-80% of current consumption levels by 2050? Do you find it acceptable, or even possible?
- Should we try to aim for that?
- By when would you think such a change could be achieved?
- If you had the all the powers, how would you try to realize this goal?
- What kind of policy measures would you use?
- What do you think of stronger measures, like quotas for CO2 emissions or resource use?

The consumption policy survey was filled in by the participants within 2-3 weeks after the interviews were carried out. The policy proposals were developed on the basis of a literature review and 17 expert interviews. The policies included in the survey are listed in Table 2. Each one of the proposed policies was described with ca. 100 words, and then the participants were asked to evaluate their feasibility and acceptability on a Likert scale from -3 to 3. The participants were encouraged to be critical in their evaluations. One of the consumption policies "Neighbourhood sharing facilities" received highly positive evaluations (2 or 3) from all respondents, and hence it was not included in the analysis.

Table 2: Consumption policies evaluated by the participants (See also Ahvenharju, n.d.)

Short name	Code	Explanation
Ban on advertisements	ADVBAN	Ban on advertisements of specific products or services (e.g. flights, meat) with high impact on resource consumption
Specified resource tax	RTAX	High tax (40-70 %) on specific products or services (e.g. flights, meat) which have high impact on resource consumption
Material footprint tax	MTAX	Material footprint tax on all products and services
National target for resource consumption	8TARG	Setting a national target (e.g. 8 ton material footprint) for the level of natural resource consumption per capita by the year 2050
Individual consumption reporting	MONIT	Yearly monitoring & reporting of natural resource consumption at individual level
Quotas for selected products	PQUOT	Personal quotas for selected products and services with high impact on resource consumption
General consumption quotas	MFQUOT	Personal quotas for all natural resource consumption based on material footprint or similar
Shared use of living space	SHAREM2	Increasing shared housing squaremeters, e.g. through housing regulation
Restrictions to the size of apartments	RESTM2	Setting limits to the housing square meters per person
Neighbourhood sharing facilities	TLIBR	Setting up facilities for sharing equipments, tools, machines, etc. in all urban neighbourhoods
Local bonus schemes	BONS	Setting up local bonus schemes that encourage lifestyles with low resource consumption
Right to part time work hours	PTWORK	The right to decide own total working hours and amount of free time to all employees
Reducing maximum working hours	MAXWH	Reducing the maximum working hours (e.g. 25 hours/week)
Maximum wage cap	MAXWC	Setting maximum wage cap (e.g. 150 000 €/year/household)

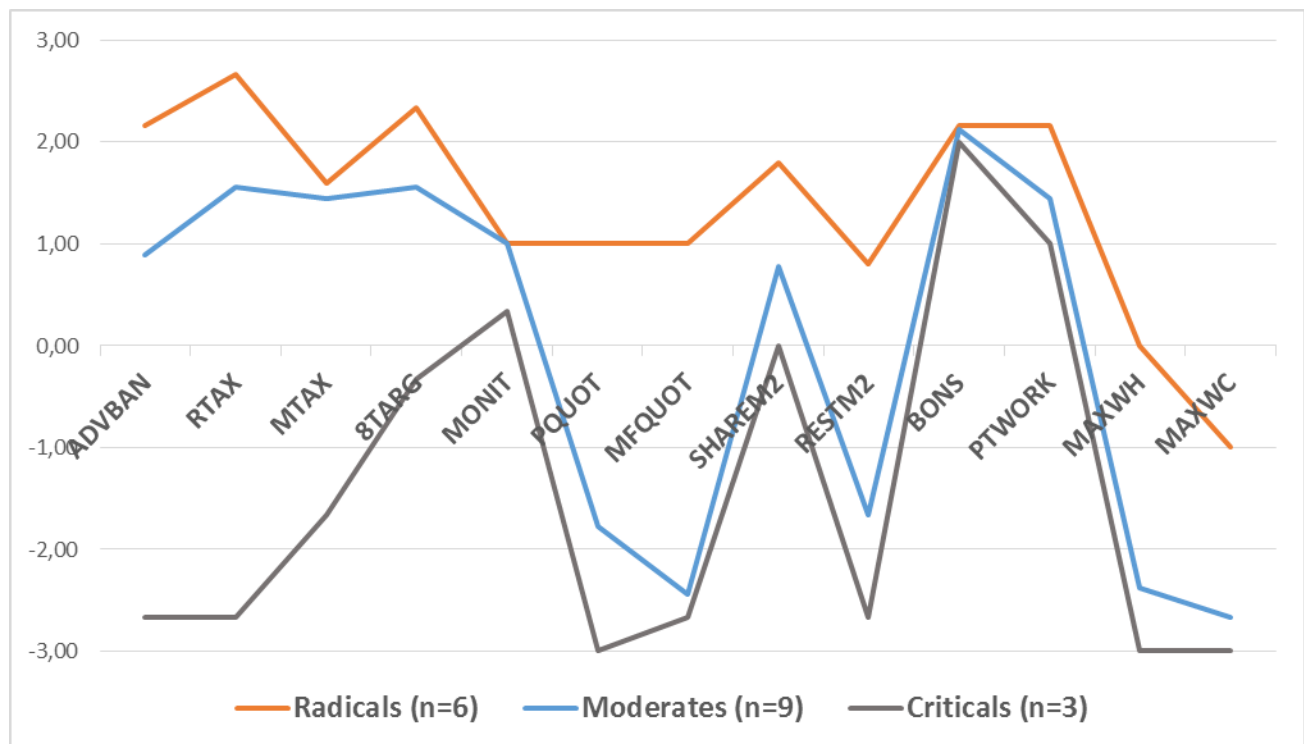
The data was analyzed both quantitatively and qualitatively. The average values of respondents' futures consciousness were calculated on all five dimensions and their sub-dimensions. Cluster analysis was used to identify different respondent groups based on their responses to the futures consciousness scale and their policy evaluations. The similarities and differences between these groups were further analyzed by comparing the average responses of these groups with each other and with their interview responses.

## Results, discussion and implications

The analysis identified three groups of respondents: *the critics* (three respondents), *the radicals* (six respondents) and *the moderates* (nine respondents). The critics evaluated the proposed policies most negatively, whereas the radicals were most positive and the moderates were in between. The average values of the evaluations by different groups are shown in Figure 1.

As can be seen from the Figure 1, the differences between the critics and the radicals vary the most regarding banning of advertisements, specified resource tax, material footprint taxes, quotas for selected products, general consumption quotas, restrictions to apartment sizes and reduced maximum working hours. The least variation in opinions is about local bonus schemes, part time working hours, individual consumption reporting, shared use of living space and maximum wage cap. The moderates share similar views with the radicals concerning banning of advertisements, resource and material footprint taxes, national target for resource consumption and individual consumption reporting, whereas with the rest of the policies they share their views with the critics.

Figure 1: Policy evaluations by the three different respondent groups



There were also some differences in the backgrounds of the respondents in different groups: all the critics were from private companies or interests representing private actors. Among the radicals, there were more scientists and local government representatives than in the other groups.

Regarding the futures consciousness among the members in the three groups, clear differences could be identified (see Table 3 and Figure 2). The critics had highest scores in both of the sub-dimensions to openness to alternatives: critical thinking and openness to experience.

Simultaneously, they had the lowest scores in both of the sub-dimensions of concern for others (virtuous leadership and CFO) as well as in the systems perception sub-dimension nature inclusiveness and time perspective sub-dimension consideration of future consequences. It should be noted that in comparing the scores, only differences of 0,3 and above were considered as meaningful.

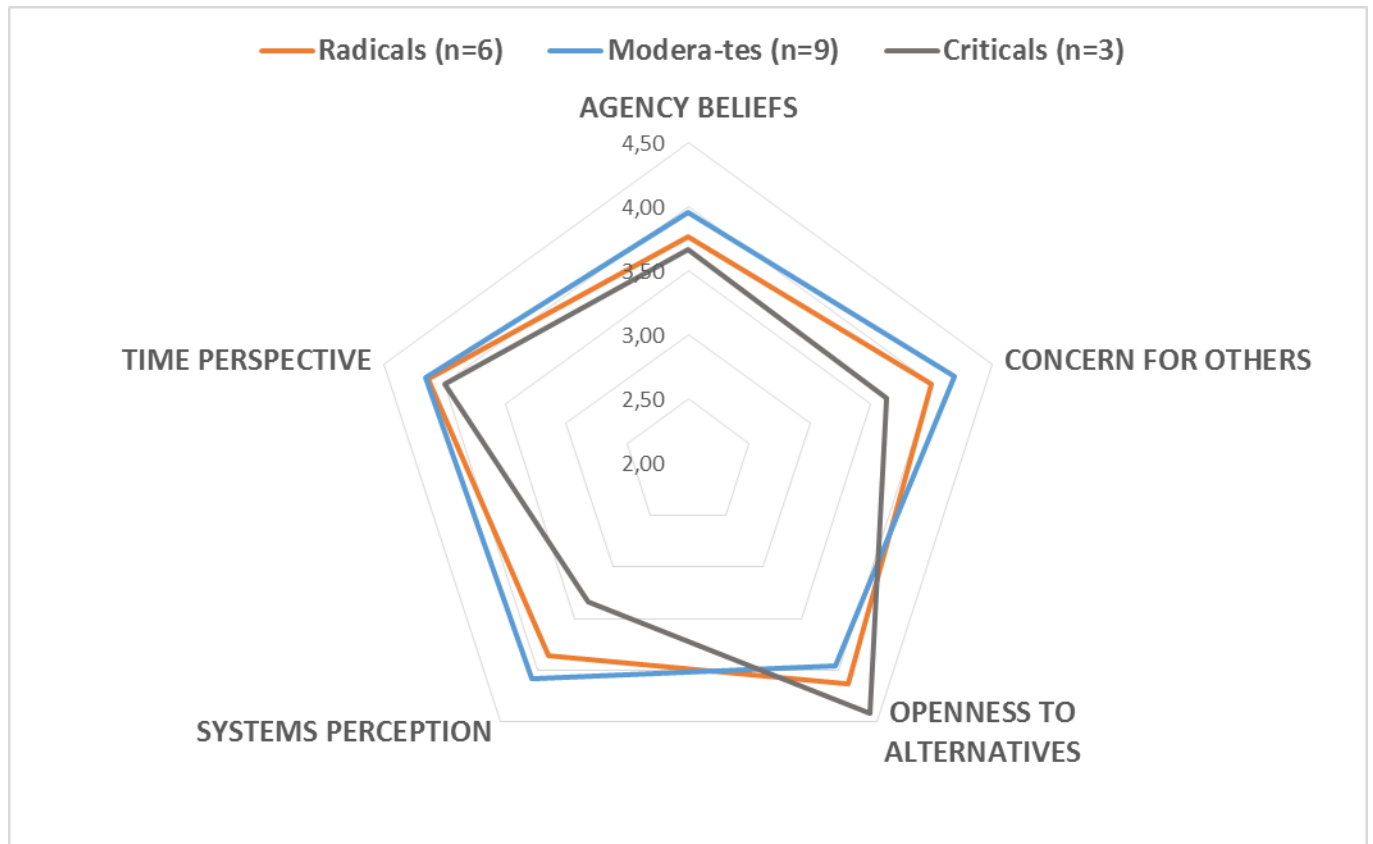
The moderates, on the other hand, had the highest scores in the concern for others sub-dimension virtuous leadership and systems perception sub-dimension system thinking; and the lowest scores for openness to alternatives sub-dimension openness to experience. Contrary to the two other groups, the radicals has the most moderate scores: they did not have the highest nor the lowest scores compared to the other groups. Compared to moderates they had similar scores in four sub-dimensions (CFO, critical thinking, nature inclusiveness and CFC), lower scores in virtuous leadership and system thinking and higher scores in openness to experience. Compared to the critics, the radicals had in general higher scores except for critical thinking and openness to experience.

Table 3: Average scores in the futures consciousness scale of the three respondent groups

	Radicals (n=6)	Moderates (n=9)	Criticals (n=3)
AGENCY BELIEFS	3,77	3,96	3,67
CONCERN FOR OTHERS	4,00	4,19	3,63
CONCERN: Virtuous_leadership	4,00	4,33	3,67
CONCERN: CFO	4,00	4,04	3,60
OPENNESS TO ALTERNATIVES	4,13	3,96	4,42
OPENNESS: Critical thinking	4,00	4,03	4,33
OPENNESS: ONE	4,25	3,89	4,50
SYSTEMS PERCEPTION	3,86	4,08	3,33
SYSTEMS: System thinking	4,22	4,56	4,00
SYSTEMS: Nature Inclusiveness	3,50	3,61	2,67
TIME PERSPECTIVE	4,14	4,15	4,00
TIME: Weighted decision	4,17	4,19	4,33
TIME: CFC	4,11	4,11	3,67



Figure 2: Average scores in the five dimensions of futures consciousness of the three respondent groups



The results described above could indicate that – within this group of regime representatives – those individuals, who had lower concern for others and lower systems perception were less likely to find the proposed new consumption policies acceptable. However, high concern for others and systems perception alone would not be enough to find the proposed policies very acceptable, but only moderately acceptable. For high acceptance the level of openness to alternatives seems to be relevant. It seems to work in two ways: it can both increase and decrease the acceptance of the proposed policies. This could be explained by the fact that openness to experience is closely related to creativity and imagination (McCrae, 1987). It has been shown that the ability to imagine the realisation of a solution increases its acceptance (Eidelman, Crandall, & Pattershall, 2009). Simultaneously, creative individuals may have lower tolerance for rules and restrictions, which in turn could lower their interest in accepting the proposed policies. Therefore, it may be due to other interests, worldview or values that an individual either finds certain rules acceptable or not. In this case, for example, the radicals have a higher nature inclusiveness score and higher concern for others, which may indicate that they are more ready to accept rules and restrictions if they promote values that are important for them.

Another interesting finding is the high scores in system thinking and virtuous leadership among the moderates. Systemic thinking could explain why the moderates were critical of those policy proposals that were unconventional (e.g. quotas and restrictions) but found policies that are in line

with the current system (e.g. taxes, monitoring systems) more acceptable. It seems that individuals who think holistically and systemically are more prone to be careful in their choices and avoid ‘shaking up’ the present balance, despite being ready to take risks in their own life. Virtuous leadership was also higher among the radicals than the critics, which may indicate a higher likelihood to take risks and look for new solutions.

Interestingly, another difference between the critics and the two other groups is the former’s low score in consideration of future consequences (CFC). The critics, in other words, are more ready to rely on the future to produce solutions to today’s problems. Hence they are not so willing to accept potentially difficult and uncomfortable solutions: they believe the answers to the problems will be found and they are not too concerned if the answers are not yet known. The moderates and radicals, on the other hand, are more likely to feel that solutions, even difficult ones, should be identified as soon as possible. Another way of explanation is that those with high CFC are more likely to be very concerned with the immediate consequences of decisions, especially if they seem to be uncomfortable (Joireman, Shaffer, Balliet, & Strathman, 2012).

*The following analysis of the interview data is still preliminary, and further analysis may still shape the findings and bring forward alternative explanations.*

The analysis of the personal data and interview results of the regime representatives reveals some interesting further viewpoints. Firstly, the respondents’ awareness – of resource scarcity and the challenges related to it – did not notably vary among the three respondent groups: radicals, moderates or critics. Among the radicals the problem seemed to have a higher priority compared with others, but the difference was not great. Respondents in all groups felt the urgency of the matter:

“The starting point is, that this [finding of solutions] cannot be pushed forward.”

*Radical respondent*

“By 2030’s there will be great changes in our consumption patterns.”

*Moderate respondent*

“The problem is not the number of people on this planet but the amounts we consume.”

*Critic respondent*

However, when discussing potential policy interventions to limit overconsumption and to achieve 80 % reduction in consumption levels by 2050, the approaches were quite different. The radicals were well aware of the enormity of the challenge “it really sounds absurd, but yes I think it is possible”, and yet they were optimistic and saw many positive signs towards that goal and many solutions already becoming self-evident. They emphasised innovativeness and creativity in finding new solutions that would make life-style changes easy, and how the general attitudes are positive to such goals. The radicals also brought up many alternatives to the current systems, which could promote the same goals: they played with the ideas of alternative economic models and emphasised human spiritual development in contrast with consumer-oriented culture.

“It requires political debate about the principles and how do we deal with constitutional rights etc. and it can be very difficult. But it is possible. – I think this is the right direction and there are many things we can already do.”

“The evolution works, youngsters, schools and others are already very active. -- It just has to be easy to make right choices in the everyday life. I believe Finns have ‘talent in their attitudes. – It means we have to be innovative and search for disruptive alternatives.”

“The question is not necessarily about restriction or quotas, but instead we should get more attention to humane questions and human spiritual, intellectual and aesthetic development as individuals and as a society. That would help us see that all happiness does not come from the new consumables promoted by multinational companies and the media.”

The moderates, on the other hand, found the goal acceptable and potentially possible, but they were far more concerned about the ways how it could be realised without causing havoc and painful losses to individuals. They were more pessimistic in their assessment on the readiness of Finns to accept limitations and more inclined to believe that changes in lifestyles will take place without strong policy measures based on restrictions. They were also very much committed to the current economic system and economic policy instruments.

“I do not doubt that we could not do it. But small steps will always produce better results than big leaps. There can be frequent small steps. We need missionaries. -- This nation is wise enough without strong [legislative] policy measures. -- We need a passion to create a new world.”

“If everything goes as in the best of worlds, carrot is always better than a stick.”

“Very radical policies are not politically feasible. Unless there is a shared understanding of force majeure, we will not get very strong policies from the politicians.”

Even the critics accepted the idea of targeting 80 % reductions in consumption levels, but they found it less appealing due to the vast changes required in achieving them. They found the reduction in consumption to be in fundamental conflict with our current economic and political system and were concerned of the difficulty in trying to change that. They emphasised the potential negative consequences, risks to equality and welfare as well as political stability. Strong policies like quotas, were seen as a way towards the past, not towards the future.

“Bringing down consumption levels is just so difficult. Maybe we should first start by trying to stop it from going up and then figure out how to get it to be negative and still keep economy going. – Strong targets cause counteractions, and then things get polarised and then comes, as we can see now in the US, what polarisation can lead to.”

“If flying would become expensive, it will become a privilege of a few. We would be kind of going back in time, and I find that a painful thought.”

## Conclusions

*It should be noted that the results presented in this paper – especially the analysis of the interview data – are preliminary, and further analysis may shape the findings.*

The results above highlight well that using futures consciousness framework in analysing the motivations behind policy choices can bring new, psychological viewpoints to the interpretations. Futures consciousness framework helps to understand the approaches taken by the regime representatives: how higher systemic perception makes one concerned about the suitability of new policy measures to the current system or how high openness to alternatives makes one able to imagine potential new solutions and look for paradigm shifts.

It should be noted, however, that the results from this analysis cannot be generalised. The subject of the research is a very specific group of regime members and the methods used were a complex mix. Hence the results, the futures consciousness, policy choices or policy opinions should not be taken to represent people in general. However, the findings could be used as hypothesis for further research.

Concerning strong sustainable consumption policy development, the results clearly suggest that in order to find support for new, different types of policies, it is crucially important to address the potential risks and concerns as well as to provide pragmatic examples of how similar policies are already implemented under similar conditions. Visionary descriptions and optimistic evaluations only get the radicals on board. And that is not enough.

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