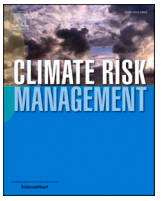
Climate Risk Management 40 (2023) 100492

Contents lists available at ScienceDirect

Climate Risk Management

journal homepage: www.elsevier.com/locate/crm



Threatification, riskification, or normal politics? A review of Swedish climate adaptation policy 2005–2022

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ARTICLE INFO

Keywords:
Climate adaptation
Securitization
Risk governance
Policy analysis

ABSTRACT

While the securitization of climate change has attracted considerable attention in academia, there is less research on the securitization of climate adaptation. We study securitization trends in Swedish climate adaptation policy from 2005 to 2022 and investigate whether Swedish climate adaptation policy adheres to threatification, riskification, or normal politics. More specifically, we look at i) discourses, ii) actor constellations, and iii) tools and resources. We find that in 2005, extreme weather events triggered a discourse shift in climate adaptation from a non-political issue towards riskification. Sweden adopted a national climate adaptation strategy in 2018, framing climate change as a risk that can be controlled through adaptation. So far, climate adaptation is managed using existing tools and strategies including research and decision support, recommendations from expert agencies, and climate risk assessments. In a similar vein, actor constellations resemble the normal governance structure. Climate adaptation appears to be integrated into business-as-usual politics rather than enforcing risk governance, and managed through existing tools and strategies instead of prompting extraordinary measures beyond day-to-day operations.

1. Introduction

As climate change unfolds across the globe, pledges for mitigation and adaptation are increasing (IPCC, 2022). In this regard, climate change has been portrayed as a pressing security concern in both academia and practice (Barnett, 2003; von Lucke 2020). Securitization refers to the process when a political issue is constructed as an existential threat to stimulate and legitimize extraordinary measures beyond day-to-day politics (Buzan et al., 1998).

Discourses connecting climate change to human security and violent conflict date back to the 1970s (Falk, 1971; Brown, 1977; Wilson 1983). Ever since a vast amount of literature has emerged on the securitization of natural resources, the environment, and climate change (see for example Albert, 2022; Arias, 2022; Scartozzi, 2022; Warner and Boas, 2019; Barquet, 2015; Gemenne et al., 2014). These discussions are also reflected in international policy, where agencies like the UN General Assembly, UN Security Council, NATO, and the European Commission have flagged climate change as a security concern (Dupont, 2019; Oels, 2012).

Climate change is also securitized among national governments (Warner and Boas, 2019; Thomas, 2017), of which Sweden is no exception (Elander et al., in press). Swedish policymakers and politicians frame climate change as the greatest threat in modern times (Proposition 2019/20:65). The 2017 National Security Strategy (Government offices of Sweden, 2017) recognized climate change as a key threat to national security. Two local governments have adopted a climate emergency declaration (Elander et al., in press).

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https://doi.org/10.1016/j.crm.2023.100492
Received 17 October 2022; Received in revised form 10 January 2023; Accepted 22 February 2023
Available online 25 February 2023

Swedish activist Great Thunberg and the Fridays for Futures movement call for urgent climate action (Trihartono et al. 2020).

By contrast, the securitization of adaptation as a response to climate change remains understudied. Climate adaptation refers to "the process of adjustment to actual or expected climate and its effects" (IPCC, 2014p. 1758). While some upcoming research indicates that climate adaptation to some extent is securitized (Mees and Surian, 2023), further investigation is needed to understand if and how securitization of climate adaptation is taking place.

Scholars have investigated Swedish climate adaptation in relation to, for example, specific sectors (Najar and Persson, 2022; Landauer et al. 2018; Ulmanen et al. 2015), municipalities and cities (Kristiansen and Granberg, 2021; Storbjörk and Hjerpe, 2021; Wamsler et al. 2020), knowledge exchange and learning (André et al. 2021; Ernst et al. 2019), maladaptation (Ibrahim and Johansson, 2022; Neset et al. 2019), and policy and governance (Elander et al., in press; Neby and Zannakis, 2020; Nilsson et al. 2012; Keskitalo, 2010). This growing body of research indicates a gap between policy and practice (Elander et al., in press; Hakala et al. 2019; Lidskog and Elander, 2012). That is, Sweden proclaims itself as a frontrunner in global climate action despite that efforts toward climate adaptation have to this date failed to bring about the societal change envisaged in policy action and planning (National Expert Council for Climate Adaptation, 2022).

Securitization theory provides an ample opportunity to further study whether discourses are transformed into on-the-ground action, and, if so, what resources are mobilized, what actors gain power, and what actions and tools are suggested. We want to better understand how climate adaptation is framed, regulated, and organized in Sweden. We apply securitization theory to unveil whether Swedish climate adaptation entails "more of the same or new paths" (Elander, 2022, p. 1). How is climate adaptation framed? Who decides? Who is responsible and how? What tools and resources are mobilized? Securitization theory can explain how certain issues and measures make it, or not, onto the higher levels of the political agenda. It can shed light on the unspoken assumptions, politics, and power dimensions that shape climate adaptation.

Along with the study presented by Mees and Surian (2023) about the Netherlands, we present an assessment of Swedish climate adaptation policy using securitization theory. We study climate adaptation policy in Sweden and its evolvement throughout time by reviewing securitization trends in i) discourses, ii) actor constellations, and iii) tools and resources. Discourses investigate what words, concepts, narratives, and scripts are used to describe climate change and adaptation. Through actor constellations, we study the actors legitimized in the discourses. Tools and resources include the policies, strategies, financial and human resources, and technologies mobilized for climate adaptation.

We organize the paper as follows: section 2 introduces the theoretical framework; section 3 outlines methods and materials; section 4 provides a brief overview of the Swedish governance model; section 5 presents the findings, summarizing securitization discourses in Swedish climate adaptation policy; section 6 discusses the implication of the findings, and conclusions are provided in section 7.

2. Threatification, riskification, and normal politics

Drawing from constructivist security studies, we investigate climate adaptation using securitization theory (Günter Brauch, 2008). Securitization theory emerged at the end of the Cold War when the Copenhagen School reconceptualized the notion of security to encompass political issues beyond military affairs (Emmers, 2019; Pram Gad and Lund Petersen, 2011). According to the Copenhagen School, securitization entails a successful discursive act "through which an intersubjective understanding is constructed within a political community to treat something as an existential threat to a valued referent object and to enable a call for urgent and exceptional measures to deal with the threat" (Buzan and Wæver, 2003p. 491). Securitization acts occur if a securitizing actor, for example, a politician or government, claims that a referent object is existentially threatened. Referent objects describe the system under threat – for example, human life and health, the environment, or social welfare. Securitization is successful when the security claim is accepted by a broader audience, and extraordinary measures follow. Security issues are thus not objective but constructed through discursive acts in which an actor portrays a political issue as a security threat to legitimize extraordinary measures beyond day-to-day politics (Buzan et al., 1998).

Following the Cold War, securitization became increasingly associated with environmental degradation and climate change (Barquet 2015; Dalby 2013). However, the application of securitization theory on environmental issues is riddled with controversy. As a concept, environmental security is highly disputed as it is unclear who is to be secured from what (Barnett 2001). In climate policy, traditional security constructions fail to explain policy responses to the diffuse and uncertain impacts caused by climate change (Diez et al., 2016) and do not correspond to a logic of exception or war (Trombetta, 2008).

Recent research suggests that securitization can come in many different forms (Diez et al., 2016). For instance, whereas the Copenhagen School traditionally puts emphasis on extraordinary measures, rule-breaking, and emergency action, more recent research highlights that securitization does not always translate into extraordinary politics, but can also prompt incremental policy responses (Floyd, 2016). This subtler form of securitization is referred to as *riskification*, which frames issues more broadly, toward various sources of harm that must be addressed. More operationally, riskification assigns probabilities to dangers to bring hazards 'under control' (often through technocratic processes) (Diez et al., 2016). This is consistent with a risk governance approach (van Asselt and Renn, 2011; IRGC, 2005; Olsen et al., 2019).

This debate has prompted questions on whether the subtler versions of securitization can continue to be packaged into the same theory (Corry, 2012), or whether there is a need to think about securitization theory as a spectrum (Diez et al., 2016). We adopt the latter. In line with Diez et al. (2016), we consider two spectra of securitization: *threatification* that builds on the Copenhagen School's interpretation of security and is characterized by imminent dangers, urgency, and extraordinary measures (Stiglund, 2021); *riskification* that decouples security from existential dangers and considers the possibility of harm from long-term, uncertain, and diffuse threats (von Lucke et al., 2014; Corry, 2012). We also include *normal politics* as an analytical category that indicates the absence of

Table 1
Analytical framework (based on Rhinard et al., 2021*).*

	Riskification	*Threatification*
Discourses	Risk-oriented words and imageries such as risk, risk reduction, risk, management, diverse challenges, probabilities, whole-of-society, uncertainty, unclear, indirect, probabilities, precaution, and scenario-planning.	Threat-oriented words and imageries such as threat, security, urgent, existential, extraordinary, clear-cut, and inevitable.
Actor constellations	For example: risk management officials, risk scientists, and insurance companies.	For example: Military officials, home army engagement, police officials, and command-and-control organizations.
Tools and resources	Existing sectoral policies, risk assessment, risk models, and crisis management budgets.	Defense policies, military surveillance tools and techniques, and civil defense budgets.

securitization by legitimizing the same actors, networks, and steering dynamics as of public policymaking and prompting standard procedures and day-to-day politics (Roe, 2012). Threatification, riskification, and normal politics can in turn be linked to different forms of governance: threat governance, risk governance, and normal governance (Diez et al., 2016).

To operationalize securitization, we apply an analytical framework proposed by Rhinard et al. (2021). The framework is specifically designed to study whether climate adaptation is threatified or riskified. Table 1 presents an overview. In line with other scholars (Buzan et al. 1998), Rhinard et al. (2021) suggest to first study discourses. To study discursive acts, we look at the *discourses* framing climate change and adaptation. Discourses are understood as the words, concepts, narratives, and scripts used to describe climate change and adaptation. We capture discourses looking at the wordings used to frame climate change and adaptation. Securitization is successful if the discursive acts legitimize and activate actors and tools beyond normal politics – and if accepted by a broader audience. We, therefore, look at what actor constellations and tools and resources are suggested in the discursive acts: *Actor constellations* investigate questions related to the allocation of responsibilities: who is responsible, who is setting the agenda, and who, if at all, is granted exceptional power? *Tools and resources* consider the policies, strategies, human and financial resources, and technologies mobilized to address climate change and adaptation.

Diez et al. (2016) provide an example of threatification versus riskification of climate adaptation: If climate adaptation seeks to increase societal resilience by implementing calculated measures – it is a response to risk. Threatification entails integrating climate adaptation into military strategies to, for example, keep out climate-induced conflicts or migration flows.

3. Methodology

Securitization is deeply rooted in historical experience (Balzacq, 2011). Pre-existing actor constellations, organization of government, collective memory, and norms and ideas shape securitizing discourses (Bigo, 2002; Corry, 2012). We, therefore, consider it

Table 2
Overview documents.

Type	*Document*
National documents	2001 Safety and crisis preparedness policy
	2003 Civil protection act
	2006 Act on municipalities' and regions' measures before and during extraordinary events in peacetime and periods of heightened alert
	2010 Planning and building act
	2008 Instructions for the Swedish Civil Contingencies Agency
	2009 Floods Directive
	2015 Emergency preparedness and response measures for agencies during periods of heightened alerts
	2015 Guidelines for regions' risk and vulnerability assessments
	2015 Guidelines for municipalities' risk and vulnerability assessments
	2015 Total defense act
	2016 Guidelines for agencies' risk and vulnerability assessments
	2017 Guidelines for county administrative boards' risk and vulnerability assessments
Climate change-specific strategies	2006 Climate bill
	2007 Climate and vulnerability inquiry
	2008 Climate and energy policy
	2017 Climate adaptation inquiry
	2017 Climate act
	2018 National strategy for climate adaptation
	2018 Regulation on climate adaptation by agencies
	2019 Climate policy
	2021 Inquiry from the Swedish climate policy council
	2022 Inquiry from the national expert council for climate adaptation
Sectoral action plans	2014 Stockholm County administrative board action plan for climate adaptation
	2018 Swedish Agency for Marine and Water Management climate adaptation action plan
	2019 Swedish Environmental Protection Agency climate adaptation action plan
	2022 Swedish Civil Contingencies Agency climate adaptation action plan

Table 3
Overview interviewees.

Type of stakeholder	*Organization*	*ID*
Public agency	Swedish Meteorological and Hydrological Institute	Interviewee 1
	The National Board of Housing, Building, and Planning	Interviewee 2
	Swedish Civil Contingencies Agency	Interviewee 3
	Swedish Environmental Protection Agency	Interviewee 4
Research	Formas	Interviewee 5
	National Expert Council for Climate Adaptation	Interviewee 6
	Stockholm Environment Institute	Interviewee 7
Association	The Swedish Association of Local Authorities and Regions	Interviewee 8
Municipality	Ljungby municipality	Interviewee 9
	Stockholm municipality	Interviewee 10
	Haparanda municipality	Interviewee 11
Private sector	Länsförsäkringar Insurance Alliance	Interviewee 12

relevant to carry out a historical review of policy documents as it provides a longer-time context for assessing how discourses, actors, and tools may have changed throughout time and whether climate events have had any impact on climate adaptation policy.

We start our analysis in 2005 when Cyclone Gudrun triggered major changes in Swedish climate adaptation policy (André, 2013). Before 2005, efforts toward climate adaptation occurred ad-hoc without clear policy support (Groven et al. 2012). The last year considered is 2022 which is when the national expert council for climate adaptation published its first report, and the year when this paper was written.

Next, we identify securitization attempts by public actors, including the Government, government agencies, and county administrative boards. We reviewed three types of policy documents to identify discourses, actor constellations, and tools and resources: i) national strategies relevant to the topics of interest in this paper (e.g. defense and risk governance); ii) climate change-specific strategies and government inquiries (including mitigation and adaptation); and iii) sectoral action plans. We further limited the document selection to those policies managing the direct impacts of climate change, i.e. natural hazards such as flooding, droughts, and erosion. In total, we included 26 policy documents for analysis (see Table 2 for an overview). When reviewing the document, we search for words or phrases framing climate adaptation in terms of threatification, riskification, or normal politics (see Table 1). We thereafter noted the actors identified as responsible for climate adaptation, and the tools and resources called for addressing climate change and adaptation. All quotes were translated into English.

Some academic literature was included to gather further insights on Swedish climate adaptation. Findings from the document analysis were triangulated against previous research for validation.

To gather more context on climate adaptation, we conducted 12 semi-structured interviews. Based on the document analysis, we identified key actors in Swedish climate adaptation. Four informants represented national agencies with allocated responsibilities for implementing climate adaptation actions and working with risk management. Three informants represented academia, as in Sweden the climate adaptation discourse is informed by research. We included three informants representing municipalities (South, Middle Sweden, and North), considering that Swedish policy stresses the role of municipalities in implementing climate adaptation. We also included the Swedish Association of Local Authorities and Regions (SKR) as they have an overview of municipalities and their work toward climate adaptation. Lastly, we included one informant from the insurance industry, which plays an increasingly important role in adaptation. An overview of informants is provided in Table 3.

We asked open-ended questions for informants to talk freely about Swedish climate adaptation. We wanted to complement the document analysis and delve deeper into actor constellations and tools and resources, and whether discourses were transformed into practice. The interviews covered the following themes: i) division of responsibilities, ii) opportunities and barriers to adapt, iii) rules and legislation for climate adaptation, and iv) tools and resources to adapt. We avoided talking about securitization as it is a highly academic and theoretical concept, which, at times, might be hard to grasp. All interviews were carried out in Swedish by one lead researcher and a supporting researcher. Notes from both researchers were merged, translated, coded, and categorized using the same analytical framework as for the policy documents.

4. The Swedish model of government administration

Understanding the Swedish model of government administration is important to understand the decentralized approach to decision-making in the country. Sweden exercises parliamentary democracy whereby the parliament, regional councils, and municipal assemblies are elected within a multi-party system. The parliament selects the Government, which, with support from the parliament, can issue ordinances, fiscal policies, and administrative procedures (Government offices of Sweden, 2022a). The Government is in turn supported by public agencies. There are around 250 semi-autonomous public agencies in Sweden that act within their specific areas of expertise. There is no ministerial rule. Public agencies are primarily responsible for coordinating actions within their area of expertise at a national level, whereas implementation occurs at the regional and local levels (Government offices of Sweden, 2022b).

At the regional level, Sweden is divided into 21 counties, each of which consists of county administrative boards and regional councils each with its own political and administrative responsibilities. Country administrative boards are governmental agencies representing the state at the regional level. The regional councils are democratically elected and responsible for public transport,

dental care, and healthcare.

At the most local level, Sweden is governed through its 290 municipalities (The Swedish Association of Local Authorities and Regions, 2022; Government offices of Sweden, 2022c). Swedish municipalities consist of an elected assembly that in turn governs the administrative units. The 2010 constitution stipulates negotiated and conditioned local self-government, providing municipalities with significant freedom to manage and implement legislative guidelines mandated by the Government. Municipalities are responsible for most welfare services, including social services, education, child and elderly care, spatial planning, waste management, emergency services, and crisis preparedness, among others. Municipalities can levy income taxes. Municipalities are allowed to outsource administrative functions and public welfare to private entities (Elander et al., in press).

5. Results: Climate adaptation in Sweden 2005–2022

Below, we provide a brief overview of the findings in relation to the analytical framework (see Table 4 for an overview). The following sections are divided into three key moments of policy developments in Swedish climate adaptation between 2005 and 2022: i) Cyclone Gudrun in 2005, ii) the first national climate adaptation strategy published in 2018, and iii) the expert council first inquiry published in 2022. We identified these time periods through inductive reasoning during the document review. We noticed that the three time periods experienced major shifts in climate adaptation policy and practice. It was validated in the interviews.

5.1. Climate change is framed as a risk

In 2005, Cyclone Gudrun caused major financial damage, infrastructure disruptions, and human suffering in the south of Sweden. The 2005 Cyclone Gudrun and other extreme events triggered significant changes in Swedish risk governance and climate policy (Interviewee 9; Storbjörk, 2006; André, 2013), which in turn altered the national discourses around climate change and adaptation. Before Gudrun, most climate-related policy discussions revolved around mitigation (Olsson, 2018; Storbjörk 2012; Knaggård, 2009). Climate adaptation only entered the political agenda as extreme weather events were attributed to climate change (Wamsler and Brink, 2014).

The 2006 climate bill framed adaptation as a means to reduce vulnerability to climate change and extreme events, for example: "Future vulnerability to a large extent depends on how we plan for and accommodate climate change through adaptation" (Proposition 2005/06:172, p. 142). A language of riskification was to some extent present in relation to natural hazards. Climate change was considered a risk multiplier, which would increase the risk of dam failure, water pollution, disease outbreak, pest infestation, stormed-felled trees, strained ecosystems, and damages to infrastructures, amongst other consequences. Probabilities and impacts were explored using scenarios. Many referent objects were identified, including the built environment, human life and health, critical societal functions, and the natural environment. The 2006 climate bill (2005/06:172, p. 10) referred to developing countries as a referent object, as poor countries "are among those countries that are the most at risk from the ongoing climate change". Most suggested actions prompted further research to assess needs, opportunities, and costs related to climate change. For example, the 2006 climate bill (2005/06:172, pp. 139–140) highlighted that: "to a larger extent, measures aimed at mitigation and adaptation should be based on scientific conclusions". Thus, the responsibility for setting the direction for climate adaptation shifted to experts and researchers. Following this, the Government appointed the Commission on Climate and Vulnerability to investigate climate change and its impacts on Swedish society.

In its final report, 'Sweden facing climate change: threats and opportunities' (SOU 2007:60), the Commission introduced climate adaptation as a complement to mitigation. Climate adaptation was discussed in relation to natural hazards such as flooding, landslides, and erosion. Future natural hazards were projected using scenarios. A language of riskification was applied, in which natural hazards posed "risks for human lives but could to some extent be prevented" (SOU 2007:60, p. 533). The Commission identified major uncertainties pertaining to for example river flows, biodiversity, costs and benefits, and global warming. It was noted that "vulnerability, adaptation needs, and costs for society are uncertain" (SOU 2007:60, p. 30). The Commission included a climate risk and vulnerability assessment for transportation, communications, heating, electricity, water supply, built environment, agriculture and forestry, cultural heritage, natural environment, and human life and health. For each sector, the climate risk and vulnerability assessment outlined risks

Table 4
Overview of findings.

Time period	*Discourses*	*Actor constellations*	*Tools and resources*
2005–2015	Risk-oriented words and imageries, for example vulnerability, risk, and uncertainty.	The Government, agencies, county administrative boards, and municipalities.	Research, climate adaptation committees, legislation, and policy integration.
2015–2022	Risk-oriented words and imageries, for example risk reduction, proactive measures, and probability.	The Government, agencies, county administrative boards, municipalities, and property owners.	National adaptation strategy, legislation, monitoring, climate risk assessments, spatial planning documents, funding, and action plans.
2022	Threat-oriented words and imageries, for example human security, urgency, and armed conflicts.	The Government and its cabinet, agencies, county administrative boards, regions, municipalities, academia, private sector, and citizens.	Decision support, legislation, monitoring, early warning systems, policy integration, funding, climate risk assessments, action plans, capacity development, multilateral cooperation, incentives, and disaster risk reduction.

and vulnerabilities, adaptation measures, and knowledge gaps (SOU 2007:60). The Commission put forward 59 recommendations on actor constellations and tools and resources. Despite earlier risk framings, the suggested actor constellations adhered to the Swedish normal governance structure. The Commission foresaw that: "practical efforts will be largely implemented at the local level, by individuals, companies and municipalities" (SOU 2007:60, p. 29). At the national level, the Commission found it difficult to identify a single national agency that could coordinate climate adaptation across regions and municipalities. National agencies and county administrative boards were, therefore, suggested to share the responsibility for climate adaptation based on their sectorial and geographical expertise. The recommended tools and resources indicated a move toward riskification and covered rather traditional risk management practices, such as hazard mapping, information sharing, and early warning systems (SOU 2007:60).

This was followed by the 2009 climate bill (Proposition 2008/09:162). The Government accepted some of the discourses, actor constellations, and tools and resources put forward by the Commision. Although climate adaptation was mentioned, no separate national adaptation strategy was presented. Instead, climate adaptation was integrated into existing strategies and frameworks such as the planning and building act (Hjerpe et al. 2014; Groven et al. 2012; Glaas, 2013). Risk-oriented framings were used to describe climate change and adaptation. In particular, we noticed risk framings in relation to climate adaptation in low-income countries: "Development cooperation should therefore increase resilience among people and economies and reduce vulnerability to climate change. An important part of this is to manage climate risks" (Proposition 2008/09:162, p. 222). The 2009 climate bill argues for integrating adaptation, disaster risk reduction, and climate-proofing into Swedish development cooperation. Turning to Sweden, the 2009 climate bill used scenarios to anticipate future risks. Climate adaptation was framed in terms of a variety of natural hazards such as sea level rise, heavy precipitation, wildfires, pest infestation, and heatwaves. Climate change was described as a risk multiplier: "high flows, floods, landslides and erosion are expected to increase with ongoing climate change" (Proposition 2008/09:162, p. 194). It was noted that climate adaptation "must penetrate the whole-of-society" (p. 161). Consequently, climate adaptation was integrated into existing regulatory frameworks and actor constellations: "Climate adaptation is a societal issue that requires cross-sectorial action. The Government believes that sectorial agencies should have more explicit responsibility for climate adaptation in their respective areas of expertise" (Proposition 2008/09:162, p. 165). County administrative boards were allocated the responsibility for coordinating climate adaptation within their geographical boundaries.

The Government allocated 300 million SEK 2009–2011 for improved knowledge of landslides, better national height data, and for county administrative boards to coordinate efforts toward climate adaptation. In 2010, the Government allocated 43 million SEK for state subsidies for implementing risk reduction measures in the built environment. In practice, municipalities implemented most efforts toward climate adaptation due to their monopoly on planning and legal obligations. Tools and resources included climate risk assessments, building regulations, physical protection, and water pumping systems (Storbjörk, 2012).

5.2. Climate adaptation – An issue for spatial planning

In 2015, the Swedish Government tasked a special investigator to clarify the division of roles and responsibilities for climate adaptation. The findings were published in the 2017 climate adaptation inquiry (SOU 2017:42). Authors included experts from the Government Offices of Sweden, national agencies, and industry organizations. A scenario-based approach was employed. Uncertainties were noted in regard to climate change and its impacts. The inquiry used a language of riskification to frame climate adaptation in relation to natural hazards. For example: "Flood risks can be reduced by proactive measures that aim to prevent an event from occurring (reduced probability) or mitigate the consequences of an event (reduced consequences)" (SOU 2017:42, p. 57). The inquiry focused on flooding, landslides, and erosion. The inquiry noted that climate adaptation spans six sectors: i) transport, ii) municipal technical services, iii) built environment, iv) agriculture and tourism, v) environment, and vi) human life and health. The inquiry, however, limited its focus to one referent object, namely the built environment. The Commission argued that the inherent complexity of climate adaptation made it impractical to include all relevant sectors (SOU 2017:42).

The 2017 inquiry deemed it unfeasible to achieve any transformative change in roles and responsibilities: "At this moment, it is not possible to change the current division of roles and responsibilities in a comprehensive way (…). Instead, we will make suggestions on how to start reducing risks of damage and facilitating climate adaptation" (SOU 2017:42p. 18). Recommended actor constellations mimicked the normal governance structure: the National Board of Housing, Building, and Planning should be responsible for responsibility for coordinating efforts toward adapting the built environment; county administrative boards should support municipalities; municipalities should be responsible for integrating climate adaptation in their spatial planning and stormwater management; and property owners should be responsible for their properties.

Drawing from the climate adaptation inquiry, Sweden passed its first national strategy for climate adaptation in 2018 (Proposition 2017/18:163). The national strategy adopted the built environment as its main referent object: "Adapting the built environment to the effects of a changing climate is often a planning issue. The issues, therefore, need to be identified and incorporated into spatial planning" (Proposition 2017/18:163, p. 11). Besides the built environment, other referent objects were included such as the environment, critical societal functions, and human life and health.

The Government adopted scenarios developed by the Swedish Metrological and Hydrological Institute (SMHI). The Government aimed for climate adaptation to contribute to "a long-term sustainable and robust society that actively addresses climate change by reducing vulnerabilities and seizing opportunities" (Proposition 2017/18:163, p. 62). Looking at the discourses, risk framings were somewhat present. For example: "In the case of a high risk, i.e. when the weighting of the probability of an event and the magnitude and severity of its consequences is high, proactive measures shall be taken, warning systems and preparedness designed, and roles and responsibilities clarified". The strategy noted many uncertainties regarding future emissions, climate change and its impacts, and subsequent adaptation strategies. As in overall Swedish governance, climate adaptation was framed in terms of recommendations

Table 5
32 agencies working with climate adaptation in Sweden.

Sector	*Agency*
Energy	Swedish Power Grid Authority
	Electrical Safety Boards
	Swedish Energy Agency
Built environment	National Board of Housing, Building, and Planning
	National Property Board
Finance and innovation	Swedish Financial Supervisory Authority
	Swedish Agency for Economic and Regional Growth
	Swedish Innovation Agency
	Swedish Mapping, Cadastral and Land Registration Authority
Health	Public Health Agency of Sweden
	National Board of Health and Welfare
Civil protection and security	Swedish Armed Forces
	Swedish Civil Contingencies Agency,
	Radiation Safety Authority
Climate and environment	Swedish Marine and Water Agency
	Swedish Environmental Protection Agency
	Swedish Chemicals Agency
	Geological Survey of Sweden
	Swedish Meteorological and Hydrological Institute
	Swedish Geotechnical Institute
Agriculture and forestry	Swedish Food Agency
	National Board of Agriculture
	Swedish Forestry Agency
	National Veterinary Institute
Transport and communications	Swedish Post and Telecom Authority
	Swedish Transport Administration
	Swedish Transport Agency
	Swedish Maritime Administration
Cultural heritage	Swedish National Heritage Board
	Sami Parliament
Foreign affairs	Swedish International Development Cooperation Agency

rather than regulations. For example, objectives for climate adaptation were formulated as"shoulds" rather than "musts" (Interviewee 6):"The objectives *should* be taken into account in policies, strategies, and planning at the national level and integrated into regular activities and responsibilities" (Proposition 2017/18:163p. 62, emphasis added).

The 2018 strategy for the most part integrated climate adaptation into existing actor constellations, indicating that climate adaptation was managed by standard procedures and day-to-day politics. The normal governance structure by and large remained the same, although some incremental changes were implemented. Responsibilities were assigned to SMHI, the National Board of Housing, Building, and Planning, 32 sectoral agencies (see Table 5), county administrative boards, municipalities, and property owners. The private sector was not considered besides property owners (Interviewee 7; Interviewee 12), who were assigned the responsibility for protecting their property in the case of an extreme event (Proposition 2017/18:163).

Municipalities were expected to transform national climate policy into ground action for adaptation (Interviewee 1; Interviewee 2). Following the principle of local self-government, Swedish municipalities have an autonomous role in climate adaptation without any clear connection to policies, regulations, or additional financial support (Interviewee 8; Proposition 2017/18:163; Elander et al., in press). The exception is the planning and building act (Regulation 2010:900) which legally obliges municipalities to assess climate risks in their comprehensive plans. Many general guidelines exist on how municipalities *could* approach climate adaptation (see for example the National Board of Housing, Building and Planning, 2010; the National Board of Housing, Building, and Panning, 2020; and County Administrative Boards, 2012), however, these guidelines are not legally binding (Olsson, 2018).

Notably, Swedish policy and legislation deal with climate adaptation as separate from risk management (see for example Regulation MSBFS 2015:4; Regulation MSBFS 2015:5; Regulation MSBFS 2016:7). The Swedish Civil Contingencies Agency (MSB) is responsible for coordinating efforts toward crisis management at the national level, and for supporting county administrative boards and municipalities in managing natural and man-made hazards (Proposition 2001/02:158). Despite its spelled-out connections to natural hazards, MSB was not allocated any responsibilities for climate adaptation (Interviewee 7). Swedish legislation differentiates between rapid onset events and slow-onset events (Proposition 1985/86:170), of which MSB only covers the former (Regulation 2008:1002). For example, slow onset hazards like erosion and subsidence are not encompassed by Swedish legislation on civil protection (Proposition 1985/86:170), instead they are covered by the Geological Survey of Sweden.

The strategy resulted in amendments to the planning and building act (Regulation 2010:900) and a new regulation (2018:1428) on climate adaptation by agencies. The suggested tools and resources blur the line between risk governance and normal politics. On the one hand, climate adaptation feeds into 'business as usual' practices and routines (Kristiansen and Granberg, 2021). In line with the measurement and control model (Elander et al., in press), the Government governs climate adaptation through evaluation and reporting. As in many other sectors, monitoring systems oblige agencies and county administrative boards to report their progress on climate adaptation to SMHI which in turn shares the findings with the Government (Interview 4; Interviewee 9). On the other hand,

other tools and resources cover rather traditional risk management practices. For example, 32 agencies and all county administrative boards must initiate, support, and evaluate the work on climate adaptation within their areas of expertise. They are required to draft climate risk assessments and adaptation action plans reflecting their scope of work (MSB, 2022b; SEPA, 2019; SwAM, 2018).

In the 2022 national budget, climate adaptation was allocated 640 million SEK in comparison to the 12 billion SEK allocated to reduce greenhouse gas emissions (Proposition 2021/22:100). In 2022, municipalities received 4 SEK per inhabitant to assess climate risks in their comprehensive plan (Interviewee 8). No additional funding was provided for implementing adaptation measures (Interviewee 10). Municipalities can apply for funding from MSB to reduce landslide and flood risks. Citizens and private enterprises cannot apply for funding. In addition, funding cannot exceed 60% of the total cost (MSB, 2022a). Municipalities must, therefore, co-fund the intervention (Interviewee 6; Interviewee 8).

5.3. The national expert council suggests understanding climate adaptation as a security issue

In line with the 2018 national strategy, the Government appointed a national expert council for climate adaptation (hereinafter 'expert council') instructed to publish a report evaluating current progress in climate adaptation on a five-year basis (in comparison to the Swedish climate policy council who, according to proposition 2016/17:146, publishes a report every year). The experts come from Västra Götaland's county administrative board, South Baltic Sea Water Authority, Umeå University, SMHI, MSB, Linköping University, SEB Bank, the Public Health Agency of Sweden, and Kristianstad Municipality.

In its first report published in 2022, the expert council employed a language towards threatification. The expert council claimed that: "climate change poses significant risks to human security. Climate adaptation is, therefore, a security issue, with implications for financial systems and civil defense, among others" (National Expert Council for Climate Adaptation, 2022p. 6). Three security realms were considered: i) physical safety and land use, ii) food security, and iii) water security. The referent objects include critical infrastructures, human life and health, the environment, and industry (National Expert Council for Climate Adaptation, 2022). In terms of urgency: "Action cannot be postponed. Without climate adaptation, ongoing societal development can lead to increased societal vulnerability with significant future costs" (National Expert Council for Climate Adaptation, 2022, p. 6). The expert council noted that climate change can trigger armed conflicts.

Accordingly, vigorous action was called for. The expert council recommended 168 measures of which some, if implemented, would integrate climate adaptation into Swedish contingency planning and the total defense strategy. For example, it was suggested to establish an interdepartmental working group at the Government Offices of Sweden to manage change and security risks.

In terms of actor constellations, the expert council advised further clarifying the division of roles and responsibilities. Expanded mandates were suggested for agencies, county administrative boards, and municipalities. The prevailing division of roles and responsibilities was further expanded to also include regions, academia, the private sector, and citizens (National Expert Council for Climate Adaptation, 2022).

It is not yet clear whether the Council's recommendations will be taken up by the Government. A new national strategy for climate adaptation is expected in 2023 (Interviewee 6).

6. Concluding discussion

Studying securitization can explain trends in the political debate and agenda setting, allocation of roles and responsibilities, and resource mobilization. Although scholars have devoted significant attention to the securitization of climate change, attempts toward securitizing climate adaptation remain understudied. We addressed this gap in previous research by reflecting upon securitization trends in Swedish climate adaptation policy 2005–2022 through discourses, actor constellations, and tools and resources. We found that different types of securitization co-exist and overlap. On the one hand, risk discourses prevail in Swedish climate adaptation policy. On the other hand, actor constellations and tools and resources reflect the normal governance structure. In line with previous research (Lidskog and Elander, 2012), it indicates that Swedish climate action struggles with a gap between discourses and practice.

Looking at discourses, we found examples of riskification. Discourses referred to future scenarios rather than immediate threats. Climate adaptation encompassed a variety of referent objects each laden with its individual securitization narrative, such as human life and health, critical societal services and infrastructures, buildings, developing countries, and the natural environment. Discourses reflected multiple dangers but emphasized natural hazards. A whole-of-society response was stressed, stipulating a multi-sector and multi-actor approach. Discourses framed climate change and adaptation as measurable, predictable, and at the end manageable. Some policy documents framed climate vulnerability as something that exists outside the borders of Sweden.

It appears that the expert council tried to disrupt the status quo by using threat discourses when framing climate adaptation. The threat discourse can be used to mobilize political responses, hence forcing climate adaptation into the realm of high politics and in turn triggering more action. However, we see little reflection on how this would unfold in practice. If successful, this framing would move climate adaptation into threat governance. This can yield adverse and unwanted secondary effects. Threat framings can open for extraordinary measures that may not require societal anchoring and investigation, hence undermining democratic processes.

In Sweden, climate adaptation policymaking and regulation incorporate significant input from experts. That is, experts adopt are securitizing actors as they can suggest moves toward securitization when presenting their decision support. The Government can accept the move towards securitization when designing policies and regulations, and therefore maintains its decisive power. The emphasis on expert knowledge places climate adaptation outside the political agenda despite its normative nature, and to some extent de-politicizes adaptation policymaking and implementation. This is reflected in the use of academic language and references to expert knowledge with little connection to political questions like segregation, income inequalities, or employment. There is little discussion

on who drives, gains, or losses in relation to the climate adaptation agenda.

In Sweden, risk discourses and strategies pair well with the normal governance structure. That is, riskification borders normalization. This allows the normal governance structure to remain in place despite discourses toward riskification. Actor constellations adhere to business-as-usual politics and practices, and no extraordinary transformation in roles and responsibilities is suggested. For example, risk discourses framed climate adaptation in reference to a variety of referent objects that cut across sectors and places. As a result, roles and responsibilities for climate adaptation were fragmented and decentralized. However, fragmentation is an integral part of the Swedish governance structure. From the 1980s and onwards, privatization and decentralization of the Swedish welfare have fragmented responsibilities for public security to a vast number of public and private actors in a multi-level governance system (Elander et al., in press; Rådestad and Larsson, 2020).

Despite framing climate adaptation in terms of risk, its implications on actor constellations are hard to discern. Though Sweden considers climate change as a main threat to societal security, climate adaptation remains integrated within the normal governance structure. Climate adaptation remains outside the scope of the work of traditional risk management agencies. Climate adaptation, or climate change for that matter, is treated as separate from risk management in legal frameworks and formal allocation of responsibilities. Instead, climate adaptation is approached as any other political issue and added on top of existing routines and operations. Actions towards climate adaptation are identified within existing policy frameworks and structures, requiring no transformative changes in governance. As a result, roles and responsibilities for climate adaptation adhered to the same actors, networks, and steering dynamics as the Swedish normal governance structure.

In terms of tools and resources, most climate adaptation has implied research and decision-support, climate risk assessments, improved legislation, and monitoring and evaluation. Most tools and resources consider climate risks as measurable and predictable, thus assuming that knowledge can trigger change. However, the literature on knowledge creation highlights that not all knowledge is actionable, and even when knowledge is taken up, it does not necessarily lead to the institutionalization of new practices (Barquet et al., 2021). Although the tools and resources called for could indicate a mild form of riskification, most of these were in place before climate adaptation entered the political agenda. It indicates that climate adaptation is managed using existing tools and strategies, rather than calling for extraordinary measures that go beyond day-to-day operations.

Securitization theory, our analytical framework in particular, could benefit from further refinement and application. First, we found that it fell short in explaining what intervening factors shape discourses and practices despite that existing governance structures, cultural norms, and historical events determine how climate adaptation is managed and by whom. We recommend that future research investigate what intervening factors shape climate adaptation policy and practice. Comparative case studies are recommended. Second, the accepting audience was underexplored as an analytical category. To this end, future research is recommended to better understand how securitization discourses travel across governance levels and who is involved in accepting or rejecting them. Third, normative questions require further attention. Are moves toward securitization desirable or not? We, therefore, recommend that future studies look further into what a securitized climate adaptation agenda entails in practice to uncover the advantages and disadvantages of such an approach. Fourth and last, our study is limited to public actors. Future research should investigate moves toward securitization from other societal actors such as civil society organizations.

Funding

This work was supported by the Research Council of Norway [grant number 302599].

Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: Karina Barquet reports financial support was provided by the Research Council of Norway [grant number 302599].

Data availability

Data will be made available on request.

Acknowledgement

This research builds on work carried out in the RISKSEC2.0 project that seeks to study whether climate adaptation is framed in terms of normal politics, risk governance, or securitization. We thank Claudia Morsut and Cathrine Witnes Karlsson for their constructive feedback. We also thank the interviewees for their input. We are grateful to the reviewers for their time in providing comments on this paper.

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