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What is the potential and demonstrated role of non-life insurers in fulfilling climate commitments? A case study of Nordic insurers

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ABSTRACT

Collective actions of stakeholders are required for fulfilling the climate commitments of the Kyoto protocol. The insurance sector's global influence and societal impact is fairly well documented. The sector influences societies based on its interaction with stakeholders, on its products, business and political stance. As such, it is a critical actor in facilitating key climate change actions of mitigation and adaptation, and has already been recognized as a leading sector in terms of climate adaptation. The aim of this paper is to explore the role of non-life insurers in fulfilling the climate commitments of the Kyoto Protocol. This paper is based on a case study on Nordic non-life insurance companies. The study documents that Nordic insurers are responding to climate-related threats and opportunities in a strategic manner by reducing their own impacts, through their core activities, and by influencing others to act. Although Nordic insurers do not classify their actions into mitigation and adaptation, but classify them according to their core activities, they demonstrate through actions their role as potential allies for nations in fulfilling the Kyoto protocol climate commitments. The study also reveals that the commercial reality of the industry is not the same as the expected contribution to climate commitments, for instance as specified in international conventions and treaties and in the Intergovernmental Panel on Climate Change (IPCC) and industry reports.

1. Climate commitments and climate change impacts on insurers

The Kyoto Protocol, of the United Nations Framework Convention on Climate Change (UNFCCC), is the key international instrument for dealing with climate change. According to the initial commitment period from 2008 to 2012, industrialized countries were collectively to reach emission reduction targets of at least 5% below 1990 emission levels. The second commitment period, from 2013 to 2020, is based on the Doha Amendment to the Kyoto Protocol. Under the Protocol, countries are to "meet their targets primarily through national measures" (UNFCCC, n.d.-a).

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The key climate change strategies are mitigation aimed at the cause through emission reduction, and adaptation dealing with climate change consequences. A comparative study of national adaptation policies in the European Union (EU) countries shows that the main policy focus was on mitigation for almost two decades, but from 2005 onwards integration of adaptation into national policies has been accelerating (Swart et al., 2009). Goodsite et al., in a 2013 white paper, address climate change adaptation in the Nordic countries and observe that although the Nordic countries have been active in initiating adaptation policy, there are challenges in terms of implementing policy and ensuring that adaptation issues are considered in the wider policy realm.

The insurance sector is highly exposed to climate change because of more frequent and severe weather events causing more claims (CEA, 2009; Dlugolecki, 2009; Mills, 2009a; Munich Re Group, 2008; Vellinga et al., 2001). Climate change risks, particularly outside Europe, are seen so immense that catastrophic events may lead to insurance market failure (Dlugolecki, 2009), meaning insolvency of insurers unable to honor their agreements with clients. In terms of insurance and extreme events, the year 2011 was named *annus horribilis* by insurance leaders (Courbage and Stahel, 2012).

The Intergovernmental Panel on Climate Change (IPCC)[1] states with "very high confidence" that climate change adaptation actions of industries is still limited, although the insurance sector is leading in terms of adaptation efforts of private entities (Adger et al., 2007). The reason may be that adaptation is critical for commercial success of the insurance sector (Herweijer et al., 2009). As of late 2012, 1148 insurance adaptation and mitigation schemes are known, from 378 insurance entities in 51 countries, mainly developed from the millennium onward (Mills, 2012).

According to IPCC (2012a,b) there is high agreement and robust evidence that insurance-related mechanisms are critical for helping households, businesses, and governments to deal with financial losses from catastrophes, although such solutions are unevenly distributed across regions and hazards, meaning that public-private partnership is often needed to deal with the situation. Hence, insurers are under pressure from international conventions and agreements to act; but articles in the Kyoto Protocol, the UN Framework Convention on Climate Change, and the Bali Action Plan call for insurance solutions, risk management and risk reduction strategies as a way to enhance climate adaptation (IPCC, 2012a,b; UNFCCC, 2007, n.d.-a, n.d.-b, n.d.-c).

Climate change is said to open up opportunities for insurers (Dlugolecki, 2009; LeBlanc and Linkin, 2010; Mills, 2009a; Munich Re Group, 2008; The Geneva Association, 2009). When adverse consequences of climate change become more evident, demand for insurance solutions are expected to grow (CEA, 2009). It is claimed that insurers therefore need to develop new products, modify existing products, build awareness and participate in public policy, disclose carbon risk, promote loss prevention, and align terms and conditions with risk-reducing behavior (Mills, 2009a).

[1] The Intergovernmental Panel on Climate Change, a leading scientific and intergovernmental mechanism for assessing climate change.

Although the Nordic region is less prone to severe climate change impacts than other parts of the world (Wilbanks et al., 2007), climatic events are well known to Nordic insurers. Among the most recent events is a cloudburst in Copenhagen in 2011, where loss estimation of 91,000 individual losses was DKK 4.9 billion (If P&C Insurance Company, 2012). According to reinsurers, this was the most expensive natural catastrophic event in Europe in 2011 (Richards, 2012). The greatest part of the claims cost was damages to industrial and private buildings, industrial and private chattel, and operating losses (Garne, 2012). In 2011, the Faroe Islands were hit by the storm Berit which, according to insurers' annual reports, resulted in more than 4000 claims and costs of DKK 71.6 million. The numbers from Denmark correspond to claims notifications from 2 percent of the total population, and 8 percent in case of the Faroe Islands. Denmark has very recently pressured insurance companies to lower private homeowners' insurance premiums if they implement home improvements for reducing their risk exposure to climate change (Miljøministeriet, 2013).

Climate change impacts, and how they are dealt with, are projected to have different impacts in the Nordic countries because of different economic structures and geographies. There is however commonalities between the countries such as the legal frameworks and collaboration have been taking place in this area for several years (Scherbenske and Diş, 2011). In a Nordic Countries' Ministerial Declaration on climate change adaptation from 2006, the need for a strategic Nordic approach to climate change adaptation was already asserted, calling for improved collaboration across national borders and sectors, particularly in the context of the Nordic Council of Ministers and other regional organizations such as the Baltic Council and the Arctic Council. A Nordic Prime Ministers' Climate Change Declaration from 2009 pledged to create Nordic low-emission societies. Joint Nordic actions are expected to be accomplished through frontier research initiatives and green transportation. The declaration identified specific research focal points, including energy efficiency, wind power, and other renewable energy sources, and Carbon Capture and Sequestration (CCS) technology (Government Offices of Sweden, 2009), but in these areas insurers may become powerful allies in fulfilling Nordic climate commitments. The Nordic Sustainable Development Strategy 2009–2012 in addition included climate and renewable energy as one of its priorities reflecting the need to address climate change at a regional scale (Nordic Council of Ministers, n.d., 2009). Furthermore, over the past five years, research on climate impacts and adaptation has been considerable, laying the groundwork for more informed and effective policies. In their own right, Nordic countries are all positive leaders in many aspects of climate change mitigation and adaptation (Goodsite et al., 2013).

In their approach to climate change the Nordic countries are breaking down the traditional distinction between the policy domains of mitigation and adaptation to ensure that adaptation and mitigation actions complement each other (Goodsite et al., 2013). To describe the Nordic countries integrative climate change approach the term 'adaptigation' has been emphasized (Langlais, 2009), as separate mitigation and adaptation focus may contradict reality of business