

# Effective communication focused on climate adaptation goals

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## Abstract

The consequences of climate change are becoming increasingly noticeable. Nevertheless, many companies are reluctant to implement climate adaptation measures, as these are often perceived as cost-intensive in the short term and not very attractive from economic point of view. Non-governmental organisations (NGOs) can play a key role in this area of conflict: As communicative intermediaries between politics, administration and business, they organise strategic communication processes, translate complex requirements and promote cross-sectoral understanding.

This article shows how NGOs can specifically identify so-called lighthouse companies, support them in the implementation of climate adaptation measures and make their successes strategically visible. The public communication of these pioneers creates a multiplier effect: other companies follow suit - out of conviction or out of a desire not to fall behind. Rogers' diffusion theory is used to explain this dissemination process, which shows how success stories of light house companies spread via social systems and emphasises the role of early adopters in particular. The customer journey also serves as a practical model for structuring entrepreneurial decision-making processes and addresses the complexity and non-linearity of real adaptation processes. Finally, the psychological principle of the Fear of Missing Out (FOMO) acts as a social amplifier.

The combination of these concepts offers NGOs an effective set of tools to contribute to the climate-resilient transformation of companies despite limited resources. NGOs are therefore not just mediators, but strategic initiators in a systematically designed communication architecture that understands climate adaptation as a collective learning movement.

## **1. Introduction and Objectives**

### **1.1 Climate adaptation: an economic challenge**

“2023 confirmed as world's hottest year on record” – with this headline on 9 January 2024, the BBC reported rising extreme weather worldwide, sometimes at unusual times, sometimes on unprecedented scales (BBC News, 2024). The consequences threaten lives and livelihoods globally. The outlook for 2024 was alarming early on – and is now confirmed: it is also expected to be the warmest year since records began, in Germany and worldwide. The German Weather Service (DWD) documented an average temperature of 10.9°C for Germany, surpassing the previous year's record (Friedrich, Niermann, Haeseler, Bissolli, & Imbery, 2024). Experience with past extreme events shows that the need to adapt to climate impacts is growing.

Although politics and the public increasingly recognise the urgency of adaptation, businesses remain reluctant, often viewing measures as costly and short-term unattractive (Berkhout, 2011). Yet regulatory pressure is rising through CO<sub>2</sub> targets, energy taxes or supply chain requirements (OECD, 2024). To overcome hurdles and make adaptation economically attractive, political incentives such as funding programmes are central. Adaptation needs, however, differ by region due to varying climate impacts, so funding schemes also vary. Companies must therefore identify and use different incentives while accounting for diverse economic, regulatory and climatic interdependencies across regions, sectors and supply chains. This complexity often overwhelms firms and industries, resulting in postponed or neglected adaptation measures (OECD, 2024).

### **1.2 Between incrementality and transformation**

The Intergovernmental Panel on Climate Change (IPCC) identifies two central goals of climate adaptation for the economy: preventing economic damage and increasing economic performance. A distinction is made between incremental adaptation (adaptation of existing structures) and transformative adaptation (far-reaching change in ways of thinking and acting) (IPCC, 2022). Transformation is a long-term process in which the basic assumptions within an organisation must also change and is associated with enormous effort. Incremental adjustments, on the other hand, aim to gradually adapt existing systems, processes and structures to changing climatic conditions without calling fundamental organisational paradigms into question. They can generally be implemented more quickly, involve fewer changes in values and are easier to integrate into existing processes (Christou and Piller, 2024).

### **1.3 Communication as the key**

The state of research on the communication of climate adaptation measures in a corporate context is still fragmented but shows a clear expansion of research (Danese & De Marchi, 2024; Linnenluecke, Griffiths, & Winn, 2013). Although companies play a central role in adapting to the physical effects of climate change, traditional management research has long excluded the dynamics of the natural environment from its strategic approaches (Linnenluecke et al., 2013). The greatest challenges lie in the implementation and communication of these complex measures. As a result, adaptation is predominantly reactive rather than a preventive strategy that anticipates risks (Haigh & Griffiths, 2012; Linnenluecke et al., 2013). The great uncertainty regarding the timing and extent of climate impacts complicates strategic decision-making (Winn et al., 2011). There is also a lack of interdisciplinary work that effectively integrates scientific findings on vulnerability into corporate thinking (Linnenluecke et al., 2013).

To overcome the economic uncertainties, regulatory complexities, and informational barriers that currently hinder companies from initiating climate adaptation measures, actors are needed to mediate between the different interests and organise strategic communication processes. For communication to realise its full potential, from concretely enabling incremental changes to stimulating far-reaching transformation processes, a strategic approach is required that

addresses different needs and fosters mutual understanding among the stakeholders involved. Well thought-out, targeted communication can promote mutual understanding and help develop solutions that meet both business and societal needs (Bücken & Kanning, 2021). While short-term, incremental measures can be accompanied by targeted information, advice and awareness-raising with comparatively little effort, transformative adaptation in particular poses the challenge of supporting complex change processes through communication and having a long-term impact - despite limited resources. To this end, continuous and targeted reporting can make a significant contribution to supporting both approaches of the IPCC. On the one hand, it can show how companies can be specifically empowered to further develop existing structures in the sense of incremental adaptation. On the other hand, a publicly visible discussion of the topic can lead to an increase in the perceived relevance of climate adaptation within companies. This in turn can change ways of thinking and acting in the long term - and thus create a basis for transformative adaptation processes.

#### **1.4 NGOs between Politics and Business**

This is where non-governmental organisations (NGOs) come into play: they can act as mediators between economic interests and social-regulatory requirements, create transparency and promote understanding between companies and municipal planning of climate adaptation measures through targeted communication (Mogelgaard et al., 2016). Especially in an environment characterised by uncertainty, NGOs are particularly suitable as communicative mediators: they often enjoy a higher level of trust, as they generally do not pursue their own political or market-based interests (Taylor and Napoli, 2008). However, such tasks can be challenging for NGOs because they often operate under considerable resource conflicts: They usually have limited financial resources and rely heavily on donations, project-related funding or government grants, which limits their planning reliability. They also face limitations in terms of personnel, as many NGOs work with a high proportion of volunteers, which limits both the availability and professionalism of human resources (Mogelgaard et al., 2016).

Thus question that arises at this point is: How can NGOs, whose human and financial resources are often limited, organise their communication strategies in such a way that they support both incremental and - in the long term - transformative climate adaptation goals effectively?

The structure of the paper follows a theoretically sound derivation of a strategic communication model for NGOs in the context of climate adaptation: Firstly, the concept of "lighthouse companies" is introduced and their role as role models is presented. The article then explains the relevance of Rogers' diffusion theory for explaining dissemination processes. Building on this, the customer journey is used as a practice-orientated structuring model for entrepreneurial decision-making processes. Finally, the FOMO principle is integrated as a socio-psychological reinforcement mechanism to illustrate the effectiveness of strategic reputation communication. This article presents a conceptual framework that is currently under development and should be understood as work in progress.

## **2. Beacons of adaptation**

### **2.1 Lighthouse Companies as multipliers**

In strategic communication on climate adaptation, NGOs play a central role as mediators and translators between politics, administration and business (Iati, 2008). They help to translate complex regulatory requirements into a language that can be understood by businesses and at the same time act as an interface for the bidirectional transfer of knowledge: on the one hand, they communicate government objectives and funding opportunities and, on the other, they pass on practical feedback from businesses to political decision-makers. These feedback loops

promote the needs-based further development of political measures and can increase their acceptance by other companies.

One possible strategy for NGOs could be to support individual companies, known as lighthouse companies, in the implementation of climate adaptation measures and to publicise their success (Alabri, 2022). The strategic communication of the climate adaptation measures that have been successfully implemented by lighthouse companies provides an example of how climate adaptation can be achieved in a practical and economically viable way with the help of existing funding programmes. This creates positive imitation pressure: other companies are motivated by the visible reputational gain of the lighthouse companies, to take their own measures - particularly out of concern about losing attractiveness in the competition for customers, skilled labour or business partners.

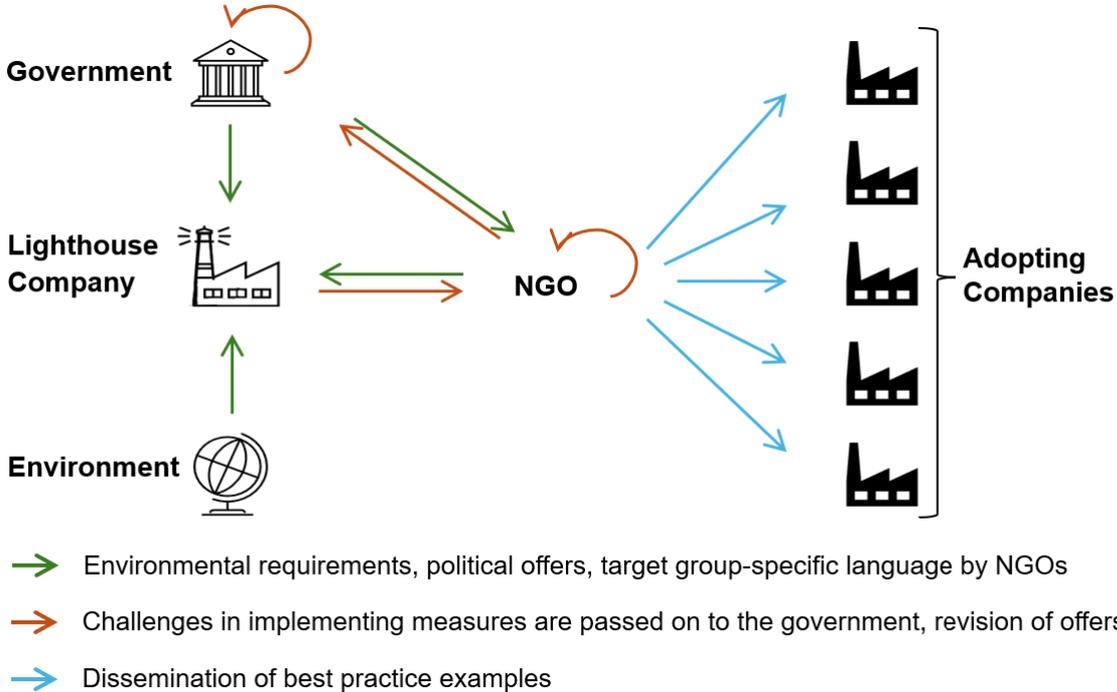


Figure 1: Communication process  
Source: Own representation.

This is important, because, for younger generations in particular, for whom sustainability plays a central role in consumption, cooperation and employer decisions, credibly communicated adaptation services can prove to be a strategic advantage (Sengupta et al., 2024). Companies that actively and transparently pursue climate adaptation strengthen their employer brand, but not only their position within complex value creation networks. On the one hand NGOs therefore help to raise awareness and provide orientation, on the other hand they help to structure the sustainability discourse by networking stakeholders, pooling knowledge and contributing to the development of climate-resilient corporate strategies. The communication process is illustrated in Figure 1.

**2.2 Rogers' diffusion theory**

In combination with a targeted dissemination effect, this approach – which focuses on making lighthouse companies visible as best-practice examples for other businesses – can provide the impetus for a larger movement, even with limited resources. In this way, a maximum broad

impact can be achieved with a minimum use of resources. In order to analyse how a self-reinforcing diffusion process can work - in which the exemplary effect of Lighthouse Companies is communicated to other companies in a targeted manner and the implementation of adaptation measures ideally takes place "as if by itself" - it is useful to apply Rogers' diffusion theory. This describes how innovations spread within social systems.

It centres on five key elements: the innovation itself, communication channels, time, the social system and the individuals involved. These influence each other by adopting or rejecting innovations in social interactions - whether through direct communication or observation. The so-called "early adopters" play a decisive role here: their early adoption has a decisive influence on later acceptance and dissemination in the overall system (Rogers, 2003). According to Rogers, for an innovation to spread independently, a critical mass around 20 % must be reached. Self-sustaining diffusion begins at this point

In order to be able to apply Rogers' diffusion theory in the context of climate adaptation, climate adaptation measures must be understood as innovations. Rogers defines an innovation as an idea, process or object that is perceived as new by the addressees - regardless of whether it is actually objectively new (Rogers, 2003). This also applies to climate adaptation measures, which may be perceived as novel depending on the company's prior experience, knowledge, or strategic orientation.

A nuanced view of the decision-making process of potential adopters is needed to increase the likelihood of adopting climate adaptation measures. Rogers describes this as a sequence of five phases: Knowledge building, persuasion, decision, implementation and confirmation. Each phase requires specific forms of communication in order to reach the target group effectively. Tailored communication in the area of climate adaptation must take into account both the specific phase in which a company is within the adaptation process and its regional and sectoral context. NGOs, acting as communicative intermediaries, play a central role here by identifying successful adaptation efforts by lighthouse companies and presenting them in a targeted manner at the appropriate point in the adaptation process. These best practice examples can be strategically communicated to adapting companies in a way that suits their current decision-making phase and contextual needs.

In early phases, such as the knowledge or persuasion phase, companies need orientation, confirmation and credible role models. Here, NGOs can use flagship projects to raise awareness and reduce perceived risks. In later phases – such as the decision or implementation phase – communication must be geared towards specific instructions, industry-specific advantages and clarity about financing options. At the same time, communication must reflect the regional climate impacts and industry-specific pressures to which companies are exposed, which strongly influences their perception of urgency and feasibility.

Only by tailoring their messages to the level of preparedness and operational context of the targeted companies can NGOs effectively promote adaptation to climate change. In this way, communication becomes a strategic lever that empowers people to take action by being relevant, timely and credible.

However, Rogers' model can be criticised for depicting the adoption process in an exclusively linear fashion, with either an adoption or a termination of the adoption process at the point of the decision phase, as shown in Figure 2 (Howaldt et al., 2019). Repeated visits to earlier touchpoints are not planned (Rogers, 2003). The early phases in which uncertainty about climate adaptation measures prevails are therefore particularly critical - it is precisely here that trustworthy information, credible actors and tangible examples are needed (Wollmann and Püringer, 2024), as well as the opportunity to reconsider one's own decisions and avert the cancellation of the adoption process. This is also because corporate decisions in the context of

climate adaptation are often associated with considerable uncertainty regarding their economic impact (Kotz, Levermann and Wenz, 2024). This can lead to changes in decision-making logic - such as longer decision-making cycles, a greater emphasis on rational considerations and an increased need for information.

**2.3 The customer journey as a structuring model**

The concept of the customer journey offers a useful addition here: it understands decision-making processes as a dynamic, non-linear journey with the possibility of revisiting omitted touchpoints (Okeke et. al., 2024). It overcomes the linearity criticism of Rogers' model (Howaldt et al., 2019) and enables practical implementation through a targeted approach along the entire journey. If the steps for adopting an innovation are integrated into a customer journey, it could look like figure 2.

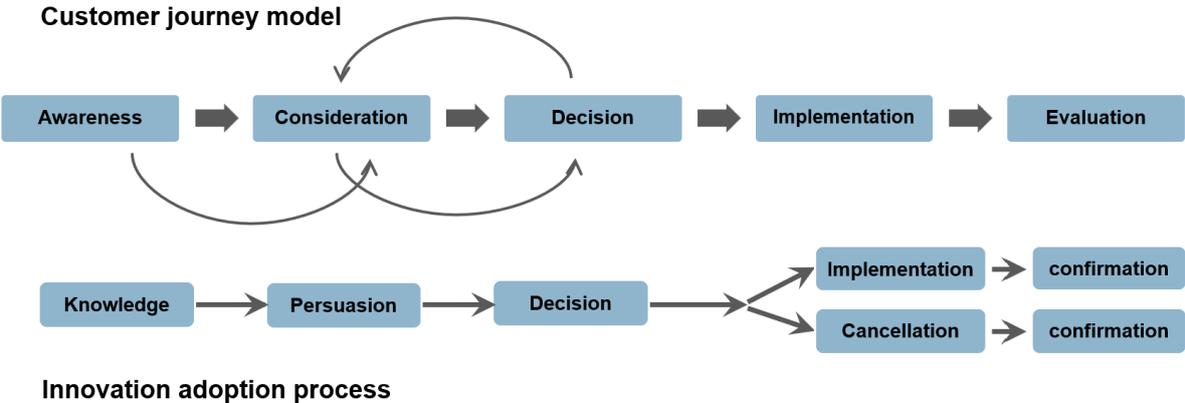


Figure 2: Linearity innovation adoption process vs. flexibility customer journey mapping  
 Source: Own representation based on Rogers, 2003.

The parallels between the two models are striking: awareness and information gathering, attitude formation and focused research, followed by decision-making, implementation and evaluation phases. NGOs can use this knowledge strategically by aligning their communication measures to visualise the successfully implemented climate adaptation measures of the lighthouse companies for adopting companies along these phases – from the first approach to the visualisation of positive experiences.

The comparison clearly shows the advantage of breaking the linearity of the decision-making process of Rogers' innovation adoption process. A decision against the implementation of climate adaptation measures by adopting companies does not always automatically lead to a fundamental rejection, but can lead to a repeated examination of information, which can lead to a further decision in favour of the measures.

**3. A strategic communication lever**

Another strategic communication lever that NGOs can utilise in their mediation role is the principle of Fear of Missing Out (FOMO). Originally known from social psychology, FOMO describes the persistent fear of missing out on worthwhile developments or experiences that others are already participating in (Gupta and Sharma, 2021). Psychologically, this phenomenon is rooted in the need for social belonging and is reinforced by social comparison processes (Gupta and Sharma, 2021). In an organisational context, FOMO manifests itself in particular as reputational pressure: companies fear not only economic disadvantages, but also a

loss of reputation if they are perceived as lagging behind because they are late in addressing key sustainability or climate issues.

In this sense, the strategic visualisation of successful lighthouse companies by NGOs can be understood not only as a classic means of providing information, but also as a trigger for social comparison processes. The message: "Other companies in our industry are already successfully implementing climate adaptation measures - are we missing the boat?" creates an implicit pressure to act among observers. FOMO acts as an accelerating factor in decision-making behaviour, particularly in industries where innovative ability and future orientation are strongly linked to reputation.

NGOs can make targeted use of this dynamic in their communication work by emphasising the positive effects of pioneers in an emotional and reputationally effective way. The targeted combination of rational argumentation and the activated social dynamics of the FOMO principle creates a communicative impulse that not only closes information gaps regarding possible climate adaptation measures in adopting companies but also has a motivational effect - without having to resort to traditional means of pressure.

This makes it clear that FOMO is not just an individual phenomenon but can also be a socially dynamic factor in the economic context. It shapes imitative behaviour, generates reputational movement dynamics and can be seen as an opportunity to accelerate the pace of innovation towards sustainable and climate-resilient corporate management.

#### **4. Conclusion**

In view of the increasing urgency of climate adaptation measures and the simultaneous reluctance of the business community, this article shows how NGOs can make an effective contribution despite limited resources. Through the targeted identification and communicative staging of so-called lighthouse companies, they succeed in making concrete adaptation measures visible and positioning them as positive practical examples. In conjunction with Rogers' diffusion theory, the concept of the customer journey and the FOMO principle, a strategic communication model is created that combines rational information with emotional motivation. NGOs act not only as mediators between politics, business and society, but also as strategic initiators for the dissemination of climate-resilient solutions. Overall, it is clear that NGOs have great potential to act as strategic actors in the communication field of climate adaptation - despite limited resources. The combination of rational arguments, practical examples of success and targeted activation of social dynamics creates an effective approach to support both incremental and transformative adaptation processes. In this way, NGOs contribute not only to raising awareness, but also to structuring the sustainability discourse in the economy. They promote orientation, trust and movement - and thus make a significant contribution to turning climate adaptation from an exception into a corporate matter of course.

#### **5. Further Research**

The strategic communication presented in this article on the promotion of corporate climate adaptation by NGOs offers numerous starting points for further research. Future studies could investigate the extent to which the support and visualisation of lighthouse companies actually leads to an increased adoption of adaptation measures across the board - for example through qualitative case analyses or quantitative impact studies. It would also be worthwhile to empirically record the specific influence of reputation gains and FOMO-based communication strategies on the decision-making behaviour of companies.

Another promising line of research concerns the further development of the customer journey in the context of climate adaptation: How does the journey of companies actually take place - especially in different industries, regions or company sizes? Which touchpoints are decisive and how can they be specifically designed?

Overall, the combination of diffusion theory, customer journey and the FOMO principle opens up a wide range of possibilities for the targeted further development and practical design of communication strategies in the field of climate adaptation - a highly relevant field of research in view of the pressing ecological and economic challenges of our time.

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