

Topics in the press

- **Natural** disasters such as the recent earthquake in Japan and the volcanic eruption in Island that grounded air traffic in 2010 have always received media attention.
- **Availability of resources** is becoming more important due to global trade dependencies. While the focus used to be exclusively on energy resources such as oil and gas, new topics include rare earth metals, lithium and phosphorous.
- **Environmental issues** related to resource production and use are a decisive factor for public acceptance. Issues range from contamination of mining sites to fossil fuel emissions to CO₂ storage.
- **Geohazards** caused by human activity stir fear in many people living in proximity to production and exploration sites. Geothermal wells have already caused minor earthquakes and damage to buildings.

Introduction

Over the past years, press coverage of topics related to geosciences has increased significantly, due to their growing relevance not just for politics and economics, but for our daily lives. Subjects range from natural disasters such as earthquakes to environmental issues and the availability of geo resources.

Media coverage is crucial to gain public acceptance for new projects, policies and technologies. However, there are challenges to covering geological or geophysical topics. Readers and journalists often lack a scientific background, companies lack a coherent communication strategy and researchers lack experience in talking to the media. Different parties look to the press to cover their side of the story – while the press is looking for a good story to sell.

Actors

- **Readers** are looking to the press for information (“How does this concern me?”) and opinion. A convincing article has the power to change peoples’ minds.
- **Journalists** are looking to convey information – and to sell their product. Rule of thumb: Scandals make for a more exciting read than success stories.
- **Companies** want favourable press coverage. To achieve this, an active relationship with the media is key. So is providing correct and complete information!
- **Researchers** need to provide independent analysis and break down complex information for the press. This can prevent hysteria caused by misinformation.
- **Interest groups** can act as watchdogs but also push their own agenda. They can mobilize the media by stirring fear, outrage or sympathy.

Sudden popularity: Rare earth metals

Rare metals are an example of a geological subject that was widely ignored for a long time, then experienced an explosion in media interest. There are two reasons for this: First, demand is growing rapidly due to use in upcoming technologies such as wind power and electric vehicles, but also in consumer electronics. Second, China controls 97 % of the worldwide production and has recently cut export quotas. This dependence raises fears of supply shortages.

Media success factors:

- Huge economic and political relevance
- Dramatic story: Supply shortage is looming
- Relates to the reader: Rare earths are contained in everyday products.

Supporting mechanisms:

- Coverage prompts more coverage – subject gains momentum
- Agencies and research institutions publish additional data and receive media attention in return

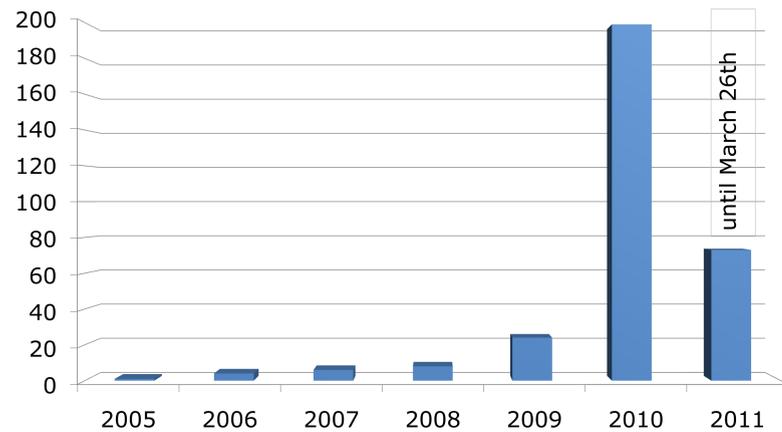


Fig. 1: Number of search results for German articles containing the terms “Rare Earths” or “Rare Earth Metals” in the Gruner + Jahr press database

Clash of the experts or the power of headlines

Among the first 10 Google hits for “Stuttgart 21 Geology” [in German]:

Schwäbische.de/dpa (03.09.2010): **Experts Disagree about Geology of Stuttgart 21.**
The planned excavation works and the drilling raise fears among many citizens of Stuttgart. Some experts warn of collapsing craters like in Cologne or drying mineral springs. The reason for concern is the difficult geology and groundwater situation in the valley of Stuttgart.

Stuttgarter Zeitung (27.09.2009):

Stuttgart 21 Tunnel – Experts say: Beware of Swelling Gypsum

The risk is called Gypsum-Keuper, and it is lurking underneath the city of Stuttgart. When it gets in contact with water, [it] swells up ... the ground rises. Two geologists from Tübingen deem this scenario as not as unlikely in the case of Stuttgart 21.

Süddeutsche Zeitung (18.08.2010):

Shaking New Buildings

Whoever knows the expert forecasts must strongly advise against the large-scale project *Stuttgart 21*. In the underground of the planned train station, geological catastrophies are lurking. Their impact is impossible to predict.

Die Tageszeitung (21.11.2010):

Only Minor Geological Risks at Stuttgart 21

Geological risks of Stuttgart 21 are negligible, says survey report. Even mineral water springs are most probably not at risk. But small risks are persisting.

Focus (20.11.2010):

Stuttgart 21: Geological Risks Can be Managed

According to civil engineer ..., the risk of constructing a tunnel through the strata of the Gypsum-Keuper is negligible, as was explained during the 6th conciliation round of railway project *Stuttgart 21*. ... Opponents, however, see inconceivable extra cost.

From neutral coverage to scare stories: CCS coverage

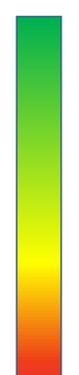
In its initial stages, CO₂ storage received limited yet neutral coverage, mostly in reputable and nationwide media. Benefits and drawbacks were stated alike. But with the start of large-scale exploration projects, fear and resistance grew among residents, politicians and regional interest groups. Many felt the project management had not informed them about potential risks. Their concerns were taken up by local and national media, which didn’t always check the facts. Barendrecht (Netherlands) and Weyburn (Canada) are two examples of projects which received bad press based on dramatic but questionable claims.



Fig. 2: Anti-CO₂-Storage Poster from The Netherlands and Germany

Unconventional Gas Search in the Press

2008
2009
2010
2011



- **Wittlager Kreisblatt (25.01.2008): To get to the Heart of Gas**
... in the region, [the village of] Oppenwehe is known for Asparagus. This may change. Experts suspect more: They are talking about Gas. ...
- **Neue Westfälische Zeitung (22.09.2010): Gas Search is Like a Long Journey**
People were curious to learn about the results of the ExxonMobil well. The answer was given ... by [an ExxonMobil representative] to the members of Stemwede’s Committee for Housing and Urban Development
- **Spiegel Online (17.08.2010): Hazardous Gas Production – Fire from the Water-Tap**
... The industry is hoping for a billions worth bonanza – but now the documentary „Gasland” shows how hazardous the methods are.
- **Westdeutsche Allgemeine Zeitung (02.11.2010): Gold-Digger’s Spirit in the Gas Field**
New Drilling Technology to Secure Energy State NRW New Gas Resources. But Spelling Trouble in the USA.
- **Neue Westfälische Zeitung (13.01. 2011): Exxon Puts Project on Ice**
Until yesterday, no special operating plan had been submitted to the mining authorities.
- **Westdeutsche Allgemeine Zeitung (28.03.2011): Exxon Sticks to Drilling Gas Test Wells in NRW: „We don’t Know Anything about a Moratorium”** – The dispute ... is escalating.