



**#REMforum 2017**  
May 11 & 12, 2017 – St.Gallen

# Introduction to the Conference Theme

**Prof. Dr. Rolf Wüstenhagen**

Good Energies Chair for Management of Renewable Energies, University of St. Gallen

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Partners

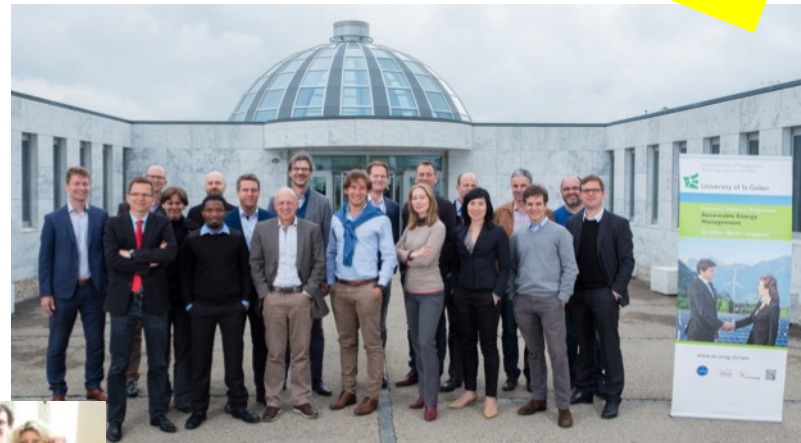
**aee**SUISSE

Assoziationsmitglied für  
anwendungsbereich Energie- und Energiemanagement



# A warm welcome to all of you – in particular to participants and alumni of our executive education programme REM-HSG

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[www.es.unisg.ch/rem](http://www.es.unisg.ch/rem)



# State of the Energy Transition

1. **Climate Change** is more urgent than ever...
2. **Renewables are cheaper** than ever...
3. **Cheap capital** is abundant...

...and yet we're in one of the **fiercest battles ever** over the transition to clean energy.



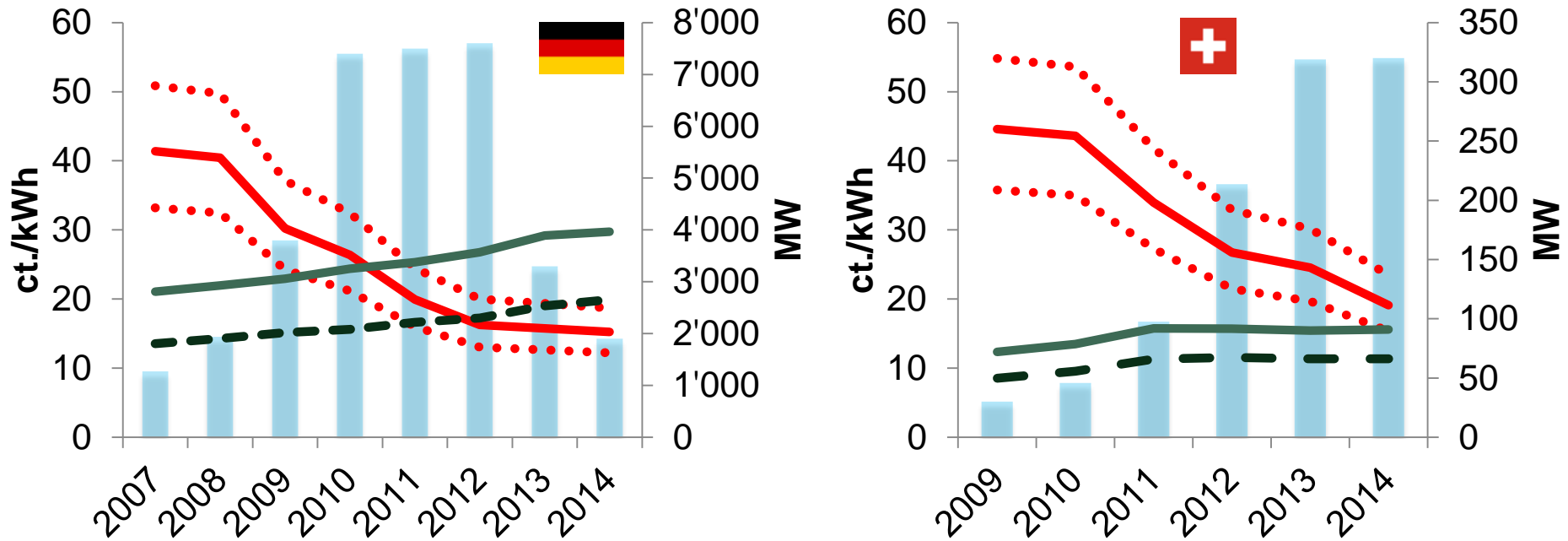
# 1. Climate change is more urgent than ever



Good Energies Lehrstuhl für  
Management Erneuerbarer Energien

# 2. Renewable energy is cheaper than ever

## Cost of solar PV vs conventional electricity



# 3. Cheap capital is abundant

Negative interest rates: an opportunity for financial innovation?

SWITZERLAND INTEREST RATE



SOURCE: WWW.TRADINGECONOMICS.COM | SWISS NATIONAL BANK



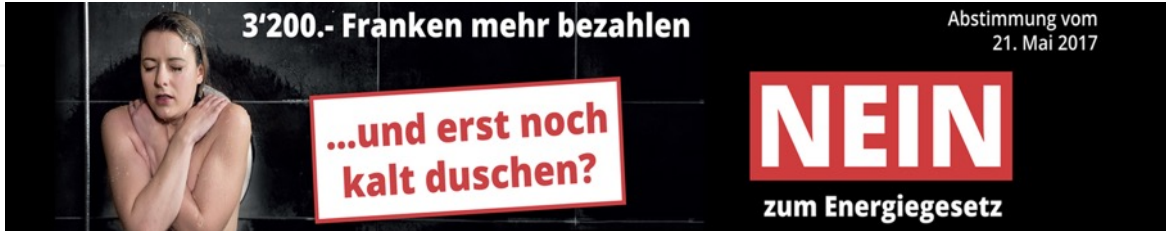
# ...and yet: Energy transitions face fierce battles

SUSTAINABILITY / FUTURE OF ENERGY 2017

## Fears for UK green targets after Brexit

Progress of renewable energy has suffered recent setbacks in the UK, but green alternatives to coal, oil and gas still offer long-term promise

BY JIM MCCLELLAND – MARCH 2, 2017



3'200.- Franken mehr bezahlen

Abstimmung vom 21. Mai 2017

...und erst noch kalt duschen?

**NEIN**

zum Energiegesetz



**Blick**

Home News Sport People Ratgeber Life Gesundheit Virtual Reality Auto Video Services

Energie-Experte Wüstenhagen mischt sich in den Abstimmungskampf um die Energiestrategie 2050 ein

### «Es wird gelogen, dass sich die Brennstäbe biegen!»

Er ist einer der renommiertesten Energieexperten Europas. Ob dem Abstimmungskampf um die Energie-Strategie läuft es Professor Rolf Wüstenhagen «kalt den Rücken runter. «Es wird gelogen, dass sich die Brennstäbe biegen!», sagt der HSG-Mann. «Da kann ich nicht still bleiben!»

# State of the Energy Transition

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...and yet we're in one of the **fiercest battles** ever over the transition to clean energy.

**Why is that?**



# Question 1

## Why is the energy transition not happening more quickly?

1. First things first, there are more important issues to address
2. Lobbying reached an all-time high
3. Citizens lack awareness about energy issues
4. There is a lack of political leadership



# State of the Energy Transition

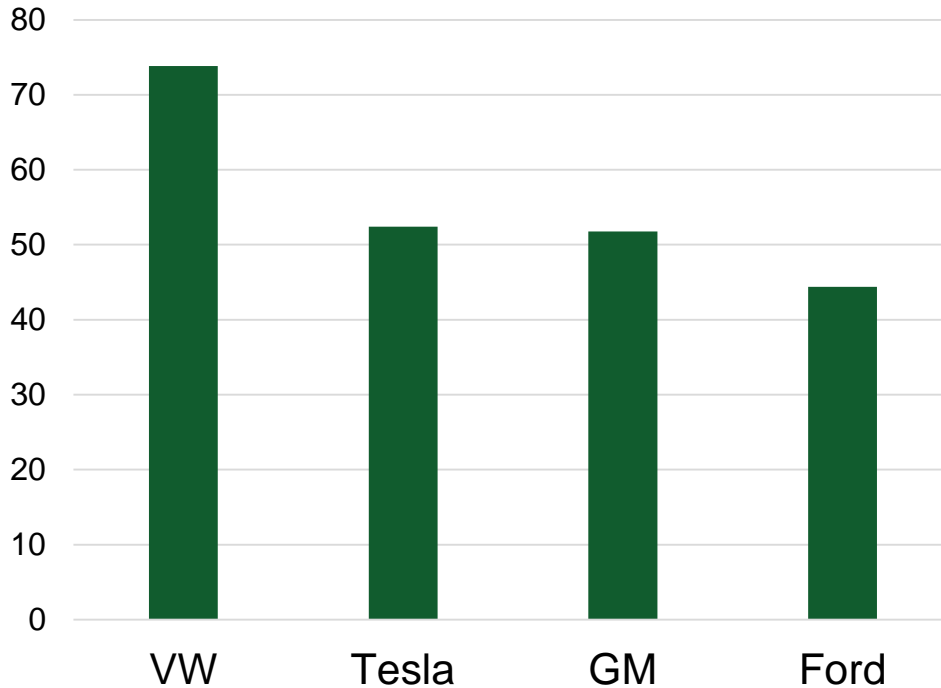
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- A. **Understand real-life decision making**
- B. **Understand policy's role, but don't stop there**

# A lot is at stake in energy & car industries

Market Cap [\$bn]



Electric Vehicles + Add to myFT

## Volkswagen plans to 'leapfrog' Tesla in electric car race

VW brand aims to sell 1m battery driven vehicles by 2025



Elon Musk hat retweetet



**Tesla** @TeslaMotors · 12 Std.  
Solar Roof



# The Stages of Grief: Emotional Reactions to Change

Article

## Leading Organizations Through the Stages of Grief: The Development of Negative Emotions Over Environmental Change

Elmar Friedrich<sup>1</sup> and Rolf Wüstenhagen<sup>1</sup>

### Abstract

This conceptual article theorizes about the effect of emotions of individual organizational leaders during a period of sustainability-related upheaval within an industry. To illustrate the effect of emotions, it proposes to draw on the model of five stages of grief by Elisabeth Kübler-Ross, a conceptual framework describing terminally ill patients' responses to their impending death. The authors adapt Kübler-Ross's taxonomy and use anecdotal evidence from grieving top managers of energy companies in response to the nuclear phase-out in Germany. The article conceptualizes the influence of emotions in the decision-making process of key agents in response to institutional pressures in their field. The article suggests that focusing on emotional influences will add an important dimension to the analysis of sustainability strategies, and discuss implications for further research at an individual and organizational level.

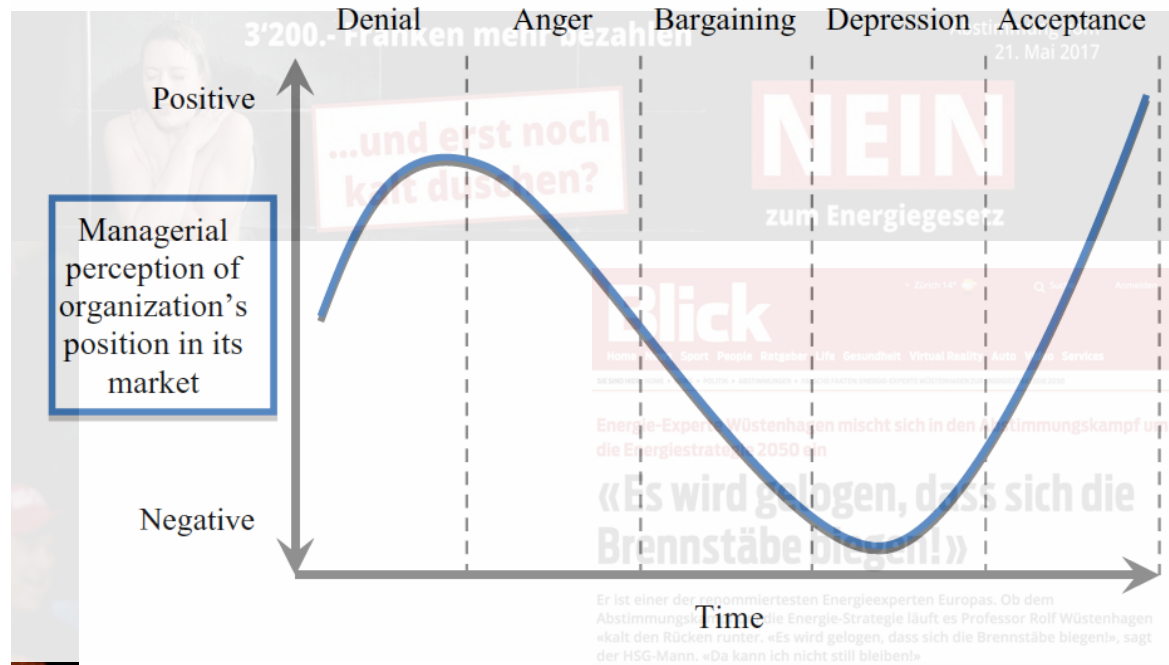
### Keywords

emotions, stages of grief, organizational change, decision-making, corporate

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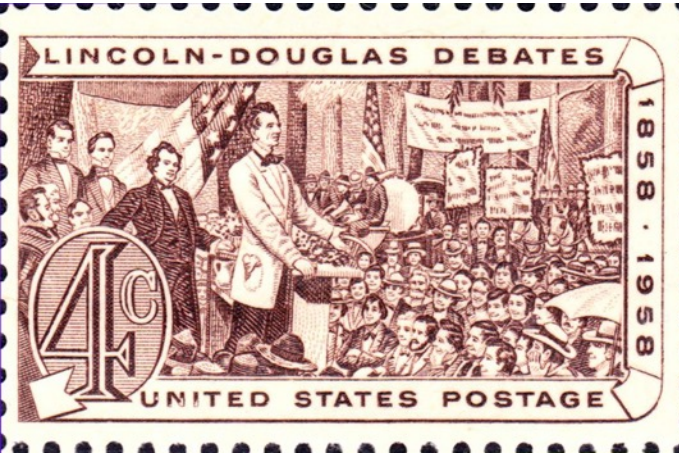
## after Brexit

green alternatives to coal, oil and gas



Friedrich & Wüstenhagen (2017)

# How do we take wise decisions?



<http://www.racheltanurmemorialprize.org/waiting-for-the-facebook-bus-24th-and-valencia/>



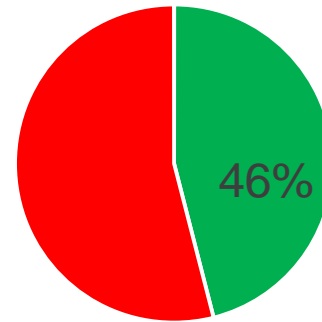
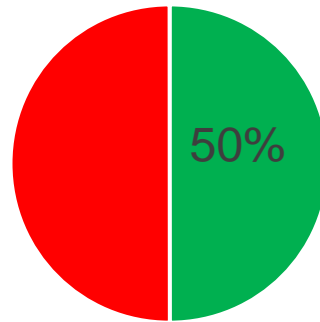
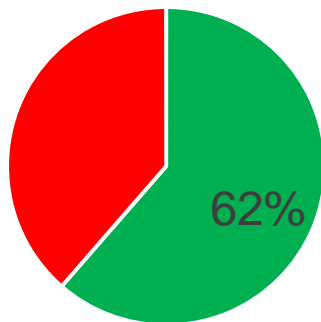
# Opinion swings ahead of popular votes

T-6

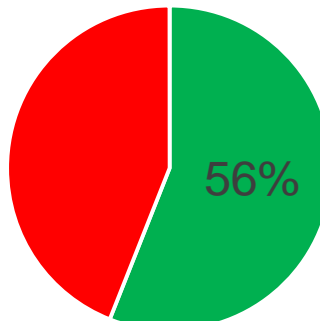
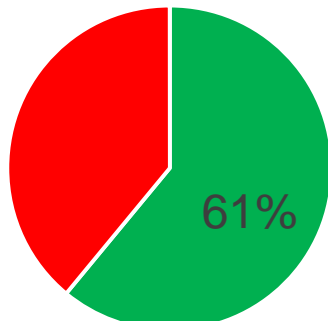
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T-0

Nuclear  
Phase-Out  
Initiative  
(2016)



Energy  
Strategy 2050  
(2017)



?

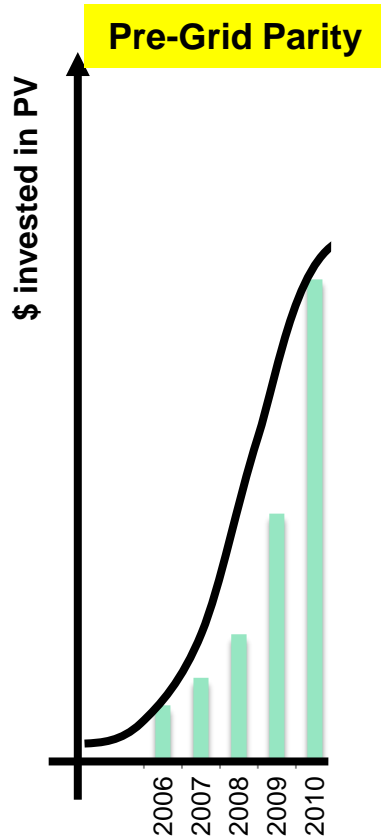
## Question 2

**Which percentage of Swiss voters will accept the Energy Strategy 2050 in the May 21 vote?**

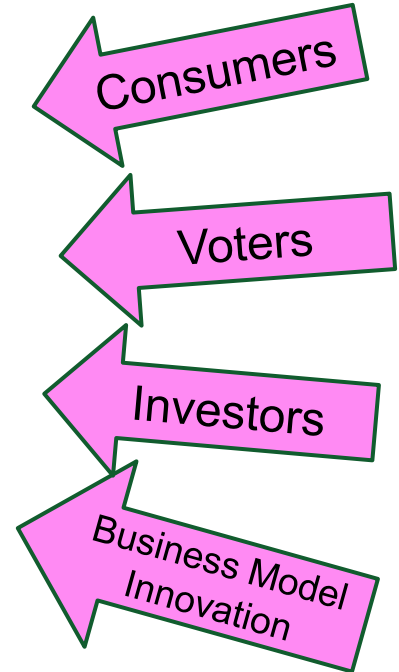
1. Less than 45%
2. 45-50 %
3. 50-55 %
4. More than 55%



# Policy can accelerate or slow down energy transitions, but it is not the only driver



Time



# Let's make it happen!

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