

## Module 4

### Methods and Tools

"What tools do I have at my disposal?"

## Module 4.3

### Strategy development

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aufgrund eines Beschlusses  
des Deutschen Bundestages

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**Module 3** Backgrounds & Arguments: "What backgrounds should I know?"

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3.2 Travel reasons

3.3 Framework conditions

3.4 Success factors & stumbling blocks

3.5 Sufficiency

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**Module 4** Methods & Tools: "What tools are available to me?"

4.1 Project management

4.2 Stakeholder management

4.3 Strategy development

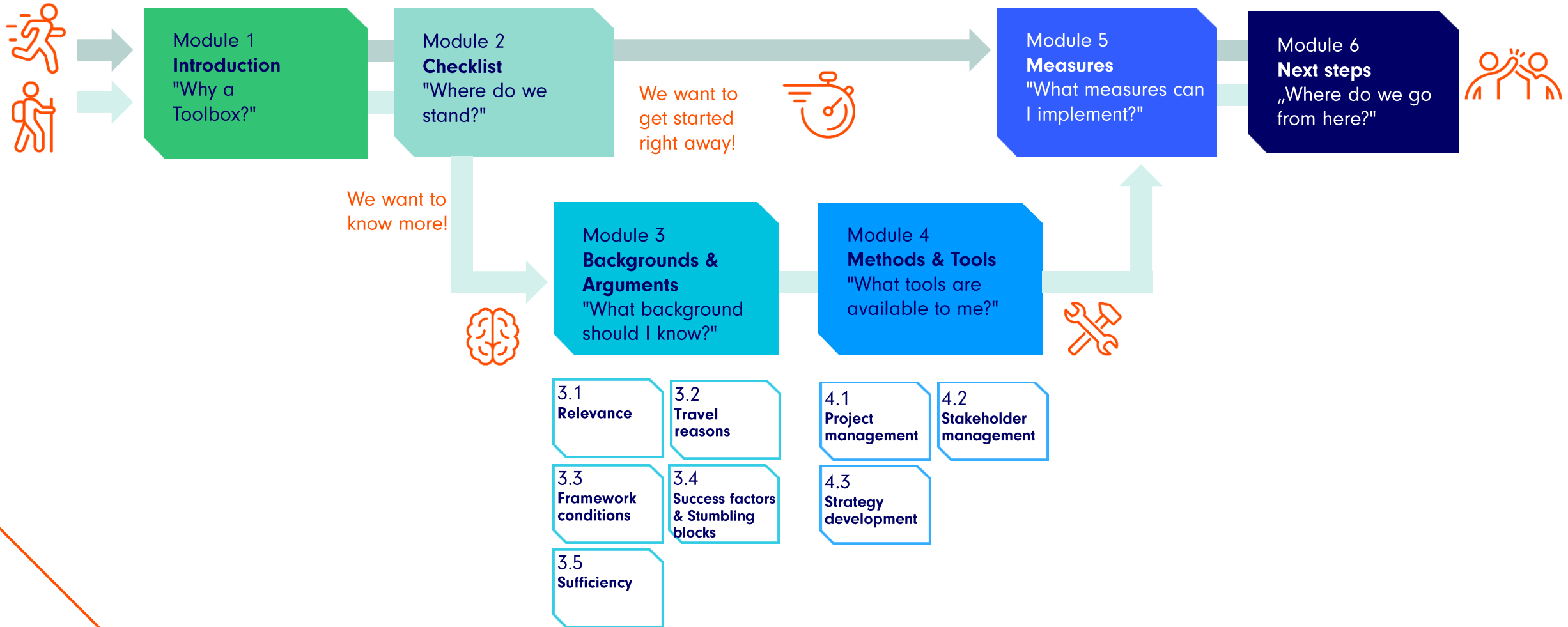
5

**Module 5** Measures: "What measures can I implement?"

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**Module 6** Next steps: "Where do we go from here?"

# Flowchart **Toolbox**



# How to use the toolbox?

The **FlyingLess Toolbox** is a modular collection of content and methods on the topic of reducing air travel.

Depending on the occasion or need, suitable modules or individual slides can be selected and used.

The order of the modules is only a recommendation.

Depending on your level of knowledge and interest, you can start with different modules.

The FlyingLess logo and the link to the website ([www.flyingless.de](http://www.flyingless.de)) should remain on the slides.

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## Module 4.3: Strategy development

### What do I find in this module?

- › With net zero setting the tone, work in the future aims to meet climate targets while being attractive to talent
- › This module addresses different methods for strategy development to reach net-zero targets while appealing to workers and helping them achieve their own goals
- › In principle, strategies can be developed both individually or collaboratively in small groups or large teams
- › Due to the need for transdisciplinary approaches in the context of flight travel reduction, the slides in this module focus on interactive strategy development methods.

### What can I use this module for?

- › Apply lessons-learned within the framework of a transformation workshop
- › Develop a concrete and, if possible, attractive scenario of what science can look like under net-zero conditions in your institution / status group / organisational unit in 2030 and what co-benefits will be possible as a result of these conditions
- › Jointly and creatively develop solutions and action points to achieve the desired scenario

# Knowledge and understanding:

What supports, what inhibits the achievement of goals in the institution?

## Destination

When implementing change processes, all the necessary knowledge is rarely available and known; it must therefore be generated as part of the preparations. This includes both technical content knowledge and knowledge about processes and actors in the field of action. Both are crucial.

## Approach

In addition to studies and expert opinions, you can also use dialogue formats to generate this knowledge

## Methods

Actor analysis or stakeholder mapping

Change workshop according to the Metaplan method (facilitated workshops)

Force field analysis (tool for the analysis of forces acting on the project)

# Creativity:

Develop solutions, measures and alternative options for implementation

## Destination

Good and viable solutions to be implemented by multiple actors require the provision of creative solution spaces where different actors can develop, discuss and evaluate ideas together

## Approach

Workshops with creative formats and minds help to think outside the usual thought patterns and to strive for good solutions.

Note: The problem view and the generation of measures should be carried out as separately as possible.

## Methods

Brainstorming

Large group formats  
(conferences etc.)

World Café (interactive group discussions)

# Mobilise support:

## Lobbying and communication for the net zero target

### Destination

For a successful change process, planned communication with relevant stakeholders is necessary so that the process is filled with life and leads to the desired change in your institution.

### Approach

Participatory tools are used here to mobilise supporters, to build up a network within and, if necessary, also outside your institution and to multiply results.

### Methods

Awards for individuals, teams, organisational units

Expert: internal hearings, fireside chats

Large group formats and conferences

Marketing, PR & Communication





## Co-creation

- › **What it's all about:** Co-creation approaches aim to involve as many different stakeholders as possible in strategy development.
- › **Implementation:** Engagement platforms provide a foundation for working together effectively and creatively; similar to design thinking, user perspectives should be given first priority.
- › In the strategy process, different techniques can be used to move from ideas to concrete implementation, including problem analyses, goal comparisons and bottlenecks, and joint development of roadmaps.

## Resources

- › Meinel, C., Leifer, L. (2012). Design Thinking Research. In: Plattner, H., Meinel, C., Leifer, L. (eds) Design Thinking Research. Understanding Innovation. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-642-21643-5\\_1](https://doi.org/10.1007/978-3-642-21643-5_1)
- › Gekeler, M., Friedrich-Ebert-Stiftung India Office (Ed.) (2019). A practical guide to design thinking A collection of methods to re-think social change. Online at: <https://library.fes.de/pdf-files/bueros/indien/15404-20190508.pdf>



## Scenario workshops

- › **What it's about:** Scenario workshops are used to look at alternative future development paths and their implications for strategy development.
- › **Implementation:** Unlike foresight, the scenario process does not start with current trends, but defines core uncertainties through an environment analysis and factor assessment, which are used to construct concrete scenarios in a future year.
- › Based on core uncertainties, scenarios are drawn up and then narrated from the future year back to the present, something called backcasting.

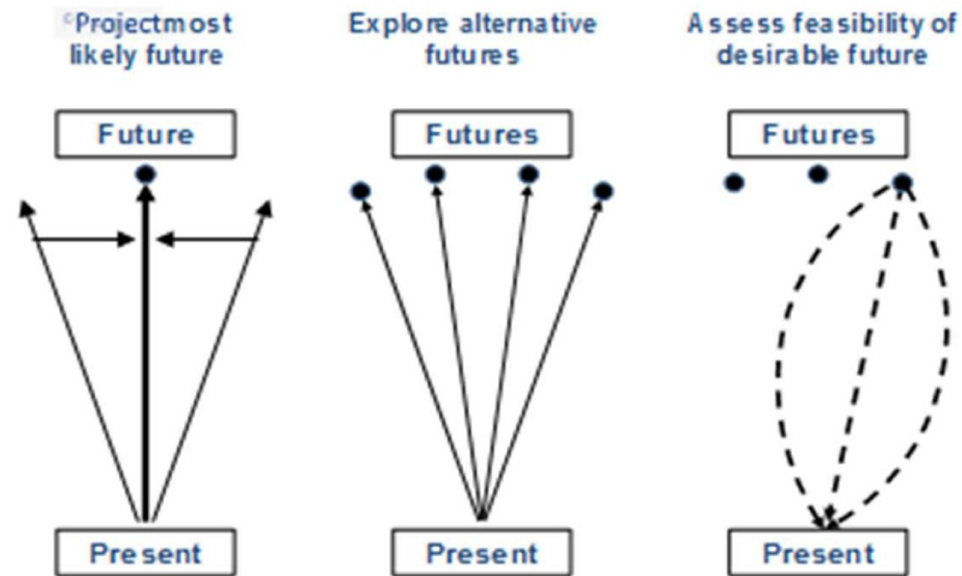
### Resources

- › Meinel, C., Leifer, L. (2012). Design Thinking Research. In: Plattner, H., Meinel, C., Leifer, L. (eds) Design Thinking Research. Understanding Innovation. Springer, Berlin, Heidelberg. [https://doi.org/10.1007/978-3-642-21643-5\\_1](https://doi.org/10.1007/978-3-642-21643-5_1)
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# Backcasting and methods of future exploration

## Forecasting Scenarios Backcasting



**Figure 1: Main distinctive characteristics of forecasting, scenarios and backcasting (Robinson, 2011)**

## Method

Unlike forecasting (looking ahead) or scenario development (developing alternative futures), backcasting is about looking back from the desired future and asking: how did we manage to achieve the goal?

*Further information on methods → Module 5.2*



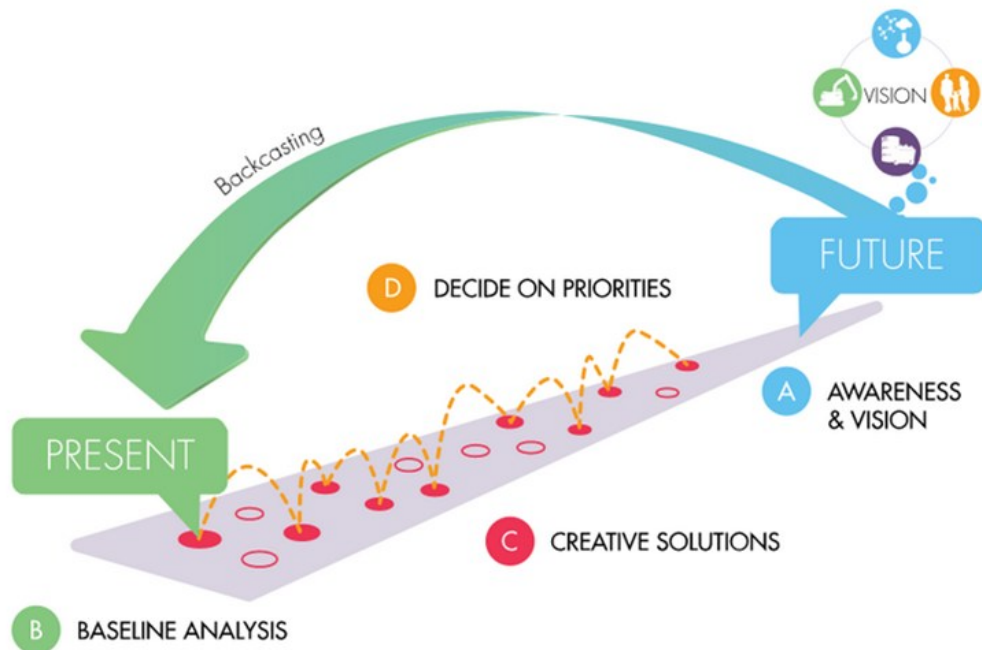
## Quick Guide to Backcasting for a Stakeholder Workshop

- › **What it's all about:** attractively painting the future to be achieved (here: 2030 and net zero has been reached) and then looking back to develop creative solutions together.
- › **Imagine: "It is the year 2030 and we are working under net zero conditions".**
  - › What does this work look like?
  - › How have we managed? How did we manage to be successful internationally and reduce our flights?
  - › What steps have we taken? What helped us in the process?
  - › What co-benefits have we discovered?

- › **Format:** Facilitated metaplan workshop, with visualisation, approx. 2 hours
- › **Step 1:** Concretise the desired future (individually, all) and communitise ("mosaic, collage") Format: individual work and sharing in small groups
- › **Step 2:** Backcasting: How did we achieve the desired future? Format: Small groups (approx. 5-7 people) develop ideas
- › **Step 3:** Plenary discussion: What measures and solutions have we found? Prioritise if necessary
- › **Step 4:** Save results, draw conclusions and agree on next steps



# Backcasting and methods of future exploration



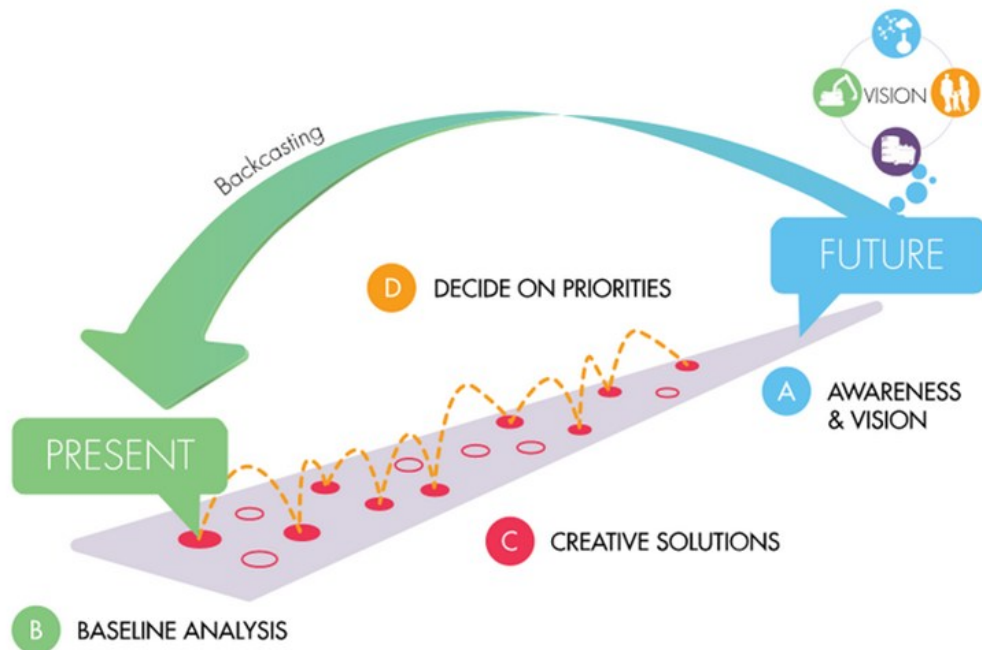
## Resources

- > Dreborg, Karl (1996). Essence of backcasting. *Futures*, 28, 813-828
- > Funcke, Amelie and Havenith, Eva (2019) View from the Future. In: *Facilitation Tools*. Manager Seminare Verlag
- > Government Office for Science (2017, November). The futures toolkit: Tools for futures thinking and foresight across UK government, 68-73.
- > Kosow, Hannah, Gaßner, Robert et al. (2008) Methoden der Zukunfts- und Szenarioanalyse Überblick, Bewertung und Auswahlkriterien. Institute for Futures Studies and Technology Assessment, Workshop Report No. 103

*Quick guide: See module 3.2*



## Visualisation of backcasting in the stakeholder workshop



### Notes

Use large metaplan walls with enough space and large PostIts. Work in a room with plenty of space, also on the walls.

### Steps for visualisation

- > Formulate the challenge for achieving the goal: "How might we...?"
- > Add contextual information and "paint" the future scenario vividly.
- > Timeline from now to 2030.
- > Distinguish between different fields of action or organisational units, if applicable.
- > Creative discussion: Who can do what and when to achieve the goal? Writing on PostIts.
- > Record the most important take-aways and next steps. Save the results!



## Change Workshop with the Metaplan method

- › **Description:** The Metaplan method enables all participants to actively participate and that a common result is produced and documented transparently for all. This leads to creativity, shared understanding, clarity and transparency as well as "ownership" of the results by all participants.
- › **Implementation:** The core of the Metaplan method are moderated workshops in which the jointly developed results are structured, visualised and, if necessary, prioritised on moderation walls.
- › Visualisations such as the decision matrix or the Wall of Work are used here.
- › In contrast to pre-formulated texts, a metaplan workshop thus enables joint structuring and penetration of a topic from the very beginning and with that active participation.

### Resources

- › Lipp U. and Will H., (2002): Das große Workshop-Buch. Konzeption, Inszenierung und Moderation von Klausuren, Besprechungen und Seminaren. Weinheim, Beltz.
- › Ovist-Sorenesen, O. and Basstrup, L. (2020) Visual Collaboration, A powerful toolkit for improving meetings, projects and processes. Wiley
- › Seifert, Josef W. (2009): "Visualisieren Präsentieren Moderieren", 27th edition, Offenbach: GABAL Verlag
- › Stolzenberg K. and Heberle K., (2006): Change Management Veränderungsprozesse erfolgreich gestalten – Mitarbeiter mobilisieren, Springer Verlag, Berlin.



## Decision matrix (visualisation)

- › **Description:** The decision matrix supports a group to deliberate and decide together and transparently on a choice of different solution options.
- › **Implementation:** The decision is divided into two parts: first, criteria are collected and, if necessary, their weighting is also defined. In the second step, all stakeholders can score the options against the criteria.
- › The application takes place in change workshops with corresponding visualisation of the options and criteria.

## Resources

- › Lipp U. and Will H., (2002): The decision matrix. In: The big workshop book. Conception, staging and moderation of retreats, meetings and seminars. S. 120ff Weinheim, Beltz.





## Individual reflection: journaling, dialogue walk, triad exchange

- › **Description:** Individual reflection either in writing (journaling) or in small dialogues (in groups of three) supports personal understanding of the topic and prepares the discussion of further steps, e.g. in the context of a change workshop.
- › **Implementation:** The participants are given 5-10 minutes to take notes on a key question. Afterwards, they are asked to discuss their findings in small dialogues of about 10 minutes (depending on the target group and the task, longer if necessary and in so-called walking dialogues, i.e. two people take the question with them on a 20-30 minute walk in nature).
- › **Procedure:** Person A speaks about himself, person B listens attentively. Then switch. Important: No discussion, no advice or similar.
- › **Variation:** The so-called triad, i.e. exchange in threes.
- › The results are always treated confidentially and are only brought to the plenary session at the participants' own request.

## Resources

- › Cornelia Andriof, Praxisbuch für wirksame Veränderung - mit der Theorie U arbeiten, 2021 Springer Gabler Berlin, Heidelberg
- › Peter Senge, Otto C. Scharmer et. Al. Presence - Exploring Profound Change in People, Organisations and Society. 2005, Boston





## Consensus procedure - Deciding on solutions together

- > **Description:** Consensus (with a "t" at the end) is a special type of decision-making in a group. Unlike other forms of decision-making (autocracy, democracy or voting), it is not based on the agreement of one or more people FOR something, but on the fact that no one has a serious argument AGAINST it.
- > **Implementation:** In the process of consensus, possible solutions to a problem (tension) are considered with all participants. In this process, drafts and change requests can be introduced, which are discussed and tried out. In detail, 7 steps are required (see diagram on the right), but with a little practice they will go quickly. It is best to try it out with something simple!
- > If no one in the group has a serious argument against this solution that cannot be dispelled, the solution is considered accepted, i.e. a decision has been reached. If an argument cannot be eliminated, the decision is against this solution.
- > In this way, all those involved at least indirectly give their consent to a solution and decisions can - with a little practice - be brought about more quickly and inclusively.

### Resources

- > Robertson, Brian J. (2016) Holacracy. A revolutionary management system for a volatile world. Vahlen Franz GmbH
- > [www.soziokratie.org](http://www.soziokratie.org)

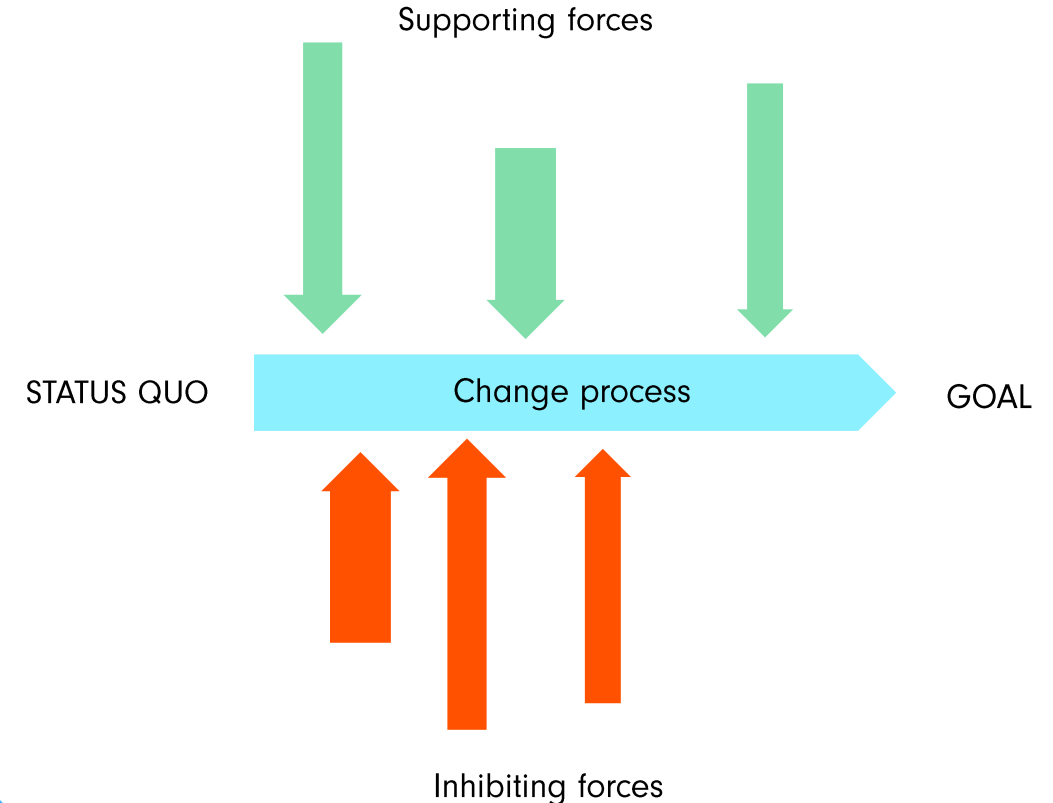


## Force field analysis

- › **Description:** The force field analysis is intended to work out the factors that can support or hinder an upcoming project. The force field analysis is used when there are problems in the implementation of a project, the causes of which are to be identified and dealt with. A change process is pending and the relevant influencing forces are to be localised in advance in order to be able to use or prevent them effectively.
- › **Implementation:** The force field analysis can be developed alone or also participatively in a team. Visualisation is also important here (see example). First, the forces are identified and presented according to their strength (scale of 1 and 5).
- › Based on this, approaches are developed to activate the supporting forces and reduce the opposing forces as much as possible.

### Resources

- › Trebesch, K. (2005): "Force Field Analysis. Toolbox for consultants and change managers." In: Organisational Development 3/2005, p. 78-81





## Make and keep agreements

**What it's about:** Securing results and agreements at the end of a workshop

### Labour issues:

- › Who does what until when?
- › What or who do we need for this?
- › How do we deal with it when it doesn't happen?

### Reflection:

- › How can we integrate the agreements into our existing work processes?

## Methods

Change workshop, ½ h at the end of the event

- › Kanban method: secure results and structure further teamwork, visualise project progress transparently

Ongoing:

- › Stand-up meetings
- › Retrospectives: monitor project progress and integrate experiences

*Further information on the methods → Module 5.2*



## Create demand - increase commitment - create visibility

**What it's about:** Use or create a regular (e.g. annual) event where the results of the monitoring can be used and discussed and, if necessary, the goals and measures can be adjusted.

### Working questions in the workshop:

- › Which – already existing – occasions, formats or events in our institution can we use for the change process?
- › Shall we start a new event?

## Methods

- › Awards of persons, work units, teams or similar that are successful in flying less.
- › Large group events
- › Surveys, if necessary live e.g. with audience response systems
- › Quiz (quick and easy to implement, also for large groups with audience response systems)

*Further information on the methods → Module 5.2*

# About FlyingLess

The aim of the FlyingLess project is to support universities and research organisations in reducing air travel, which causes a significant part of their total greenhouse gas emissions.

FlyingLess develops approaches to reduce air travel in the academic sector, which are implemented at different levels (research, teaching and administration).

The project is being carried out in close cooperation with four pilot institutions - EMBL (European Molecular Biology Laboratory) and MPI Astronomy in Heidelberg as non-university research institutions and the Universities of Konstanz and Potsdam as universities.

Further information can be found on the website [www.flyingless.de](http://www.flyingless.de).

The project is being led by ifeu Heidelberg in close cooperation with the TdLab Geography at the Institute of Geography at Heidelberg University.

The project is funded over 3 years as part of the National Climate Initiative (NKI) of the Federal Ministry for Economic Affairs and Climate Protection.

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