



### ETH WEEK 2018 SCRIPT

### ↘ Welcome Tutor of 2018!

Engaging ETH students in interdisciplinary group work is at the very core of ETH Week. One tutor guides one team through the whole week. As these students only meet at the beginning of the week, they do not know each other beforehand. They also come with a backpack of different backgrounds, experiences and knowledge. All have different attitudes and personalities, maybe even different cultures.

To work together in such a team and under time pressure is challenging. Your role is to facilitate the team process so that they learn to deal with each other, to take decisions together and eventually become really productive, share tasks, coordinate and produce a presentation by Friday afternoon.

Your role might change depending on the task at hand. Sometimes you will only observe or keep the time. Sometimes you might need to moderate a discussion and help them focus on a taking a decision or have them reflect and ask 'why?' until the team finds a clear answer they can build upon.

There is one rule you need to stick to:

You are neither responsible for the content of the projects nor for the outcome.

This includes that you should not take content decisions for them, even if you know better. ETH Week is also not a competition between tutors.

Instead, you are responsible for the process and your central task is to encourage self-directed learning.

#### emergencies

In case of an emergency, inform the Info Desk directly or call the ETH Week hotline (+41 44 633 99 10). In case of urgent emergencies, call the Emergency desk of ETH Zurich (+41 44 342 11 88). They will transfer your call to the ambulance (144), police (117), or fire brigade (118). Please immediately inform the Info Desk afterwards.

#### LEGEND

Dedicated team process time slot

designed by tutors.

Relates to one of the four design thinking phases.

....

Team works as a whole.

Team splits up in sub-teams.

Students work in pairs.

Students work individually.

Transit

There are three different kinds of time slots during the week.

- 1. Tutors have the lead. These are the four milestone time slots that you prepare together with the trainers during the online phase of the tutor training: Team-building (Sunday), Check in (Daily), Check out (Daily), Wrap up (Friday).
- 2. Tutors facilitate the team process. These are most time slots, especially during Sunday, Monday, Tuesday and Friday.
- 3. Tutors support facilitators. These are the time slots on Wednesday and Thursday.

For all time slots, it is your responsibility to know the tasks at hand and understand what the learning outcomes (goals) are. Students will rely on you to clarify what it is they need to do and how it links to the rest of the week and their presentation on Friday.

This script will give you a solid basis for that responsibility. Each spread explains one half-day in detail, from the moment the students leave the plenum and start the team process until the moment where you hand them back off to us. During most slots, you have a certain flexibility in the procedure as you might have to adapt to the needs of your team.



Special formats

friday	
sept 1	4

⊌ communicate

	7.05	Sports
off	8.30	Check in & Kick-off
tinationals n, GE	9.00	VIEW FROM START-UPS P. Eisenring, Ampard V. Garcia, Bitlumens Polish your presentation.
		Last Template.
RESEARCHERS		
	13.30	Lunch break.
ack.	15.00	FINAL EVENT Opening by L. Guzzella (President) Students present their work.
ner.	18.15 19.15	Wrap up. FINAL EVENT Award Ceremony.

20.00 Celebrations and Dinner.

# **U** Tutors and facilitators

#### **RESPONSIBILITIES OF THE FACILITATORS**

They will join us on Tuesday afternoon, to observe progress of teams and get aquatinted with your tutors, teams and work space.

On Wednesday and Thursday, they will:

- Give instructions and run the students teams through the different activities as planned in the facilitator agenda;
- Ensure all teams obtain the desired results from each exercise to be able to move forward;
- Give expert input and feedback if needed (process/method);
- Quality assurance (content) by asking reflective questions;
- Establish and maintain a positive environment in which students are encouraged to be actively engaged in the learning process throughout the workshop.

#### **RESPONSIBILITIES OF THE TUTORS**

You will have the lead during the three milestone time slots that you designed during the online phase of the tutor training: Team-building (Sunday), Check in (Daily), Wrap up (Friday).

On Wednesday and Thursday, you will:

- Support the facilitators
- Monitor effective participation
- Promote positive and engaged team dynamics
- Watch timing of their team
- Take care of space and material

Otherwise, you are in charge of facilitating the team process.

#### SUPPORT

If you need support with the team process or if it is unclear how you can assist the teams for a specific task, you may talk to one of the trainers or organisers directly. We will regularly be present in the team spaces or the ETH Week Hall. If you cannot find us and it is urgent, contact the Info Desk. In addition, the LET organises formal and casual debriefing from Monday to Thursday.

#### MEETINGS

We organise meetings every morning in parallel to the plenum sessions.

9.00 TUTOR MEETINGS Monday, Tuesday, Wednesday at InfoBar.

9.00 <sup>1h</sup> FINAL MEETING Thursday at InfoBar.

While the meetings in the morning are there to answer your questions, the last two meetings help us monitor the progress of the teams. On Wednesday, it will impact how each team continues the morning after.

The meeting on Thursday is important for the preparation of the concluding panel. During dinner, we ask you (for about 5') to bring yourself and one student to the Process wall, so that we can understand what your team is working on and how they evolved during the week.

# **∖** The process wall

Instead of handing the students a problem to solve, we ask them to define their own challenge, to frame a problem that they identify within the topic of 'Energy Matters'. They will go through a process, where every step of the way helps them find answers to the following three quesions, that we call the brief.

- Define a problem statement that describes the challenge you want to address. It needs to be linked to a Swiss actor and to one of the 5 key topics of ETH Week.
- 2. Tell an inspirational story that explains where your ideas come from, why your problem statement is relevant and how a possible solution could look like.
- 3. Critically reflect your ideas by answering the following questions:

#### SCIENTIFIC RIGOR

- What are your underlying assumptions?
- What facts and figures did you rely on?

### FEASIBILITY

- How feasible is your solution?
- What are your underlying assumptions?

### SYSTEMS THINKING

- How is the problem embedded in the ecological, societal and economical context?
- What are the implications and tradeoffs of your solution?

We document this process by filling a template at the end of each day. Using this tool, the students document their preliminary results. When they are finished working, they hang the template on their Process Wall in the ETH Week Hall where it remains until the end of the week. In this way, experts who are part of ETH Week are able to understand what students are currently working on. It also emphasises how a constructive and iterative process is the main goal of ETH Week.

By making the different building stones visible, we hope to encourage spontaneous discussions between experts and students but also between students of different teams, so that ideas can build on each other. The templates, together with the final prototypes will be part of the exhibition on Friday evening.

The tutors and the students also meet every morning during the Check-in in front of the templates where they will serve as a roadmap for the week. In the evenings, they recapitulate the day during Check-out. The sides next to the daily templates are reserved for team-related matters (mood boards etc.).

A short overview of content of the templates:

	Sunday	Wednesday	
	Monday	Thursday	Teamwork
	Tuesday	Friday	
H			

## **Daily** Templates.

#### SUNDAY

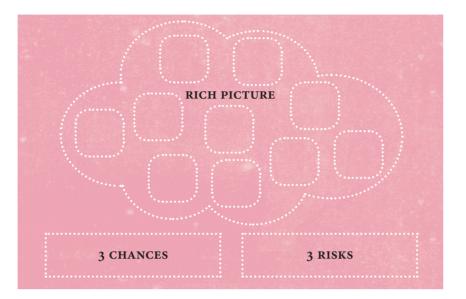
The template contains the rich picture of what energy means to each team member. It contains the essence of their first discussions on the topic and shows the knowledge already present before any content inputs.

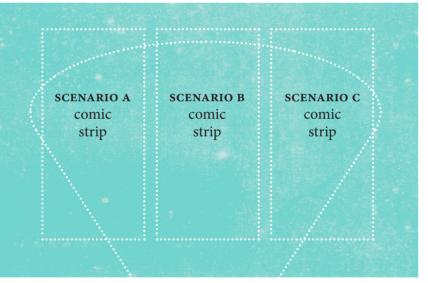
#### MONDAY

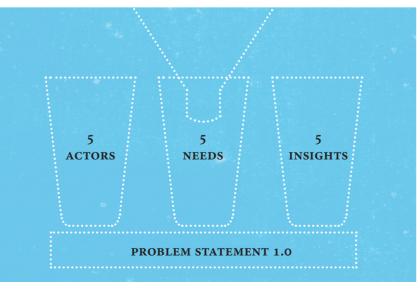
The second template shows three comic strips that highlight the most significant stories of the field trips. They are the result of a first funneling step, where the team needs to digest a large amount of information from about ten excursions to just three stories.

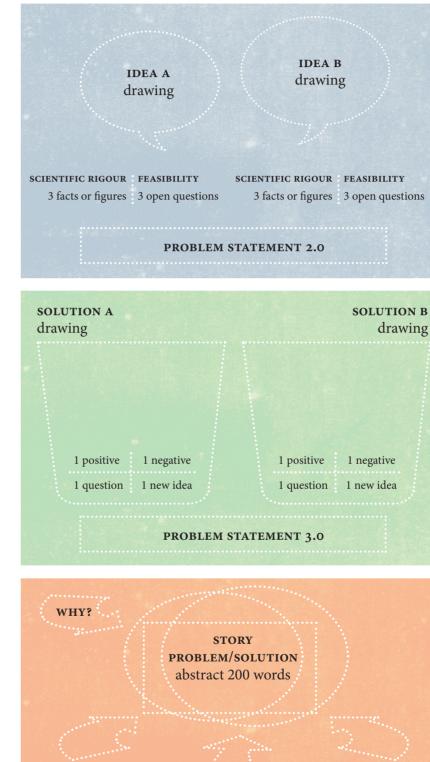
#### TUESDAY

More decisions on Tuesday result in a first selected and articulated problem statement (Version 1.0) and 3-4 other problem statements in the buckets (actors, needs, insights). By starting to visualise the evolution of their problem statement, students document how their understanding of the problem deepens.









FINAL PROBLEM STATEMENT

FEASIBILITY

**SCIENTIFIC** 

RIGOUR

- □ You can write/draw directly onto the templates, or paste prepared pieces onto them.

Please make sure your content follows the logic of the template and the wall as a whole is comprehensible from an outsider's perspective.

Be encouraged to cover the white descriptions, you can write titles for your pasted/drawn content wherever you feel the need to.

#### WEDNESDAY

The main result of the day is an improved problem statement (Version 2.0). The template will contain two solution ideas (the sketches of the morning), and first building blocks to answer the questions in the brief for scientific rigour and feasibility.

#### THURSDAY

The thursday template contains a visualisation of both prototyped ideas that were presented to the experts and the problem statement (Version 3.0). It will also contain the lessons learned from the feedback and answers to the systems thinking questions of the brief.

## FRIDAY

Finally, the last template will contain the final version of the problem statement. Answer to the brief: write an abstract describing how your solution connects to the problem and why your problem is relevant. Document the answers of scientific rigour, feasibility and systems thinking. Your prototype will be exhibited in front of the Process wall.

SYSTEMS

THINKING

### **Daily Routines.**

- □ Set up Process wall so that it serves your purpose.
- Meeting with Alan and Tutors at 9.00 at Info Desk. (except on Friday)

### **Check in.**

Before the formal kick-off of the day, meet at your Process wall. Tutors have the lead and design the procedure of the time slot themselves. Make use of the daily templates as a roadmap for the week. Clarify open questions about the process and make sure all team members feel included and are committed.

#### GOALS

- Review the results of the previous day(s).
- Understand the goals of the day at hand.
- Link the next tasks to the general goal of the week.

#### MATERIALS

Daily template. Other material if necessary.

#### TUTOR ROLE

Design the slot in coordination with trainers. Lead and keep time.

1.3 ---

Make sure students

are back at the plenum for the kick

off in time.

#### PROCEDURE

1.1	1.2 :
Gather students at	Review the results
your Process wall.	from the previous
Make sure you start	days. Facilitate a
on time.	discussion. Ask
	why? Clarify open
	questions.
8.30	8.35
*	- +

 30
 8.35
 8.45

 5'
 10'

TIMING

Strict. 10' for the task, account for 5'+5' of transit time.

### □ Hang up your template

### **∖** Check out.

After a demanding and inspiring day, meet at your Process wall. Bring the prepared template, hang it up and discuss. Tutors have the lead and design the procedure of the time slot themselves. Make use of the daily templates as a roadmap for the week. Clarify open questions about the process and make sure all team members feel included and are committed.

#### GOALS

- Briefly recap the progress of the day.
- Reflect about teamwork and participation.
- Head off to dinner and enjoy the evening.

#### MATERIALS

Daily template. Other material if necessary.

#### TUTOR ROLE

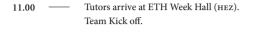
Design the slot in coordination with trainers. Lead and keep time.

#### PROCEDURE

<b>1.1</b> Walk from the team spaces to your Process wall. Make sure you start on time.	<b>1.2 *</b> Recapitulate the day. Facilitate a discussion. Ask why? Clarify open questions.	<b>1.3</b> Bon appetit!
18.30	18.40	18.45
max 10	>	5'
TIMING		

5'-10' for the task, account for 10' of transit time.

## Sunday. Meet.



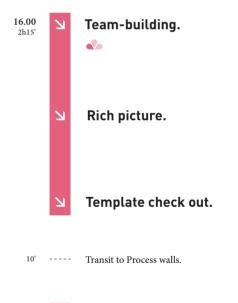
Welcome students to ETH Week Hall at 12.00 Info desk, snack.

**OPENING ETH WEEK** 13.15 Welcome, introducing tutors. S. M. Springman (Rector)

DESIGN CHALLENGE 14.00 The wallet—a demonstration.

1h45

15' Bring students to team space.



18.25 Check out. 🔹

18.30 Dinner

> INSPIRATIONAL NIGHT With Marco Mazzotti, Stefanie Hellweg and Ernst Hafen.

> > Bar closes at 22.30. Hall at 23.00.

#### □ Help Alan with the wallet exercise.

□ After the wallet exercise, stand at your team wall and take your team to your space, take team box

### **\** Team building.

The first time slot is dedicated time for students to get to know their tutor and fellow team members. The tutor will design this slot together with the trainers in the online phase of the tutor training. The team members learn about their respective backgrounds, experience and motivation to join ETH Week. They select a name to establish the team and discuss the expectations for the week.

#### GOALS

- Become comfortable working in a team setting.
- Acknowledge the diversity of the team.
- Commitment to the team and to the task of ETH Week.

#### MATERIALS

Depends on how you designed the slot.

#### TUTOR ROLE

Design the slot in coordination with trainers. Lead and keep time.

#### PROCEDURE

1.1 .... Meet your team at the Process wall, explain the road map. Walk over to settle into the team space.

1.2 ∷ 1.3 🙁 Explain the brief Start with the teambuilding activity and facilitate a you designed. Make discussion about sure they establish a the expectations of team name, too. the week.

#### 16.00 16.45 15.45 15' 45' 15'

TIMING

Flexible, allow for 1h15'. Use timeline as a guide.

### **N** Rich picture.

Introducing the topic: Energy. Students will draw a visual image or diagram of where their energy comes from, how it gets to them and where it goes from there. They will draw different elements and how these are related in the system. Students discuss the various pictures and their different views and opinions.

#### GOALS

- Identify existing knowledge about the topic.
- Start framing the topic informally.
- Become familiar with systems thinking.
- Learn how to build on each other's knowledge.

#### MATERIALS

Workbook. Paper.

#### TUTOR ROLE

Keep time. Moderate the discussion. Encourage them to be crictical and discuss about normative concepts like sustainability.

#### PROCEDURE

2.1 • Students write down the three first words that come to their mind when they think of water, hang them up.	2.2 • Explain the goals of the exercise. Each one starts drawing his or her rich picture onto a sheet of paper.	discuss the pictures to one another. Facilitate rotations	<b>3.1</b> Explain the goal of the daily tempates and how this will look. Use it as a roadmap for the week.	<b>3.2</b> Transfer the two scenarios onto the template by being as visual as possible. Mention the identified aspects, chances and risks.	3.3 * Briefly wrap up and walk back to the ETH Week Hall to hang the template back onto the Process wall.
17.00	17.05	17.15	17.50	17.55	18.10
-	5' 10	<sup>2</sup> 35 <sup>2</sup>	•5	5 <sup>°</sup> 15 <sup>°</sup>	5'
TIMING			TIMING		

Flexible, allow for 50'. Use timeline as a guide.

19.45 1h50'

- □ Remind students to register for sports before 20.00.
- □ Leave the team space at 18.15 and remind students to be in the Tent at 18.25.
- □ Go to to Process wall for Check out.

### **∖** Template.

Students learn the first habit of ETH Week, i.e. to document their daily process. The templates contain the essence of the day and function as a roadmap for the week. You will discuss them every morning at the process walls in the ETH Week Hall. The first template contains the two scenarios (and at least one STEEP aspect each) and their critical reflection (chances and risks). Also, add the team name to the template.

#### GOALS

- Visualise the results of the day onto the template.
- Understand to work under time pressure.
- Learn to be critical about your own ideas.

#### MATERIALS

Sunday template.

#### TUTOR ROLE

Moderate the discussion. Keep time. Guide the template completion process.

#### PROCEDURE

Allow for 25'. Use timeline as a guide.

Plenum session at 19.45.

## Monday. **Experience.**



- Hall closes at 23.00.

- □ Gather the students by holding up your excursion sign.
- □ Public Transport groups gather outside with both tutors present.
- □ Bus groups gather with one tutor present and one waiting by the bus (Schaffmattstrasse). Both use their lists!

#### DESTINATIONS

- Cement plant Siggenthal (BUS 1) Mattia Mäder, Enrico Scoccimarro
- Nuclear power plant Beznau (BUS 1) Fabio Bargardi, Sabine Python
- KEZO Hinwil + Climeworks (BUS 2) Silvia Burgdorf, Florian Egli
- HEPP, HSR Rapperswil (BUS 2) Martin Holub, Johanna Theilmann
- Hydroelectric power plant Laufenburg (BUS 3) Sebastian Krummenacher, Maxence Ryan
- Pumped storage power plant Etzelwerk (BUS 4) Sandro Kalbermatter, Helen Meyer
- Anergy Grid, ETH Campus Hönggerberg (Foyer HEZ) Alina Begley, Christopher McLaren
- Hunziker Areal, Zürich (ÖV) Olena Berkovska, Diego Calvo Ruiz
- ABB High Voltage Lab, Zürich (ÖV) Marcel Neidinger, Müge Özlütiras
- Masoala Hall, Zoo Zürich (ÖV) Christos Glaros, Lilian Hörler
- Adaptricity, Zürich (ÖV) Aleksandra Kim, Michael Liem

□ Remind students to ask experts for their business cards and if they could send them an email before noon on Wednesday to arrange a phone call later that afternoon for follow-up questions.

### **∖** Field trips!

Each team member joins a different field trip, visiting a different real-world setting. Students are responsible for leading the discussions and engaging in a dialogue, collecting information that they judge to be relevant. Guiding questions are available in the workbook.

Students will be asked to bring back a story: Someone... (a person, a group), wanted... (sought, desired, had a goal), but... (complication, obstacle, conflict), so... (climax, outcome, learning, resolution). On the way back students discuss these stories in pairs. Each student then writes his story down on color-coded post-it notes.

#### GOALS

- Link the global overview talk to the local context.
- Engage with real-world partners by formulating own questions, keeping an open and critical mindset.
- Put yourself into someone else's shoes and build empathy.
- Distill an experience to a story that others can relate to.

#### PROCEDURE

2.1 •	2.2
Wait for students	Exp
at meeting point.	attit
Introduce yourself.	stud
Check participants	Con
list, headcount.	part
Leave on time.	con

\*\* plain rules and tude. Remind dents to ask why. ntact external tner and nfirm arrival.

2.3 🙁 Introduce yourself to external partner, explain your role. Help him to stick to the schedule.



ON SITE

ARRIVAL

TIMING

Depends on excursion. See excursion factsheet.

### Monday morning.

- □ Make sure you have the excursion package.
- □ Track of the head-count during excursions.
- □ Thank the external partner(s) and hand them the gratitude.
- □ Bring the students back to the hall by 15:30. Students regroup and head back to the team spaces by 16:00.

#### MATERIALS

Excursion brief for tutors, including participants list. Color-coded post-it notes: Someone (yellow), Wanted (green), But (pink), So (orange). Gratitude for external partner.

#### **EXCURSION COORDINATOR ROLE**

During the excursions tutors become coordinators, meaning you only have organisational tasks.

The coordinator keeps track of all students, keeps the time and encourages students to interact with the people on site.

The coordinators are also the contact person for our external partners: introduce yourself, be the face of ETH Week, make sure to respect the external partners rules and wishes. Make sure students behave professionally and like a guest.

Contact the Info Desk, if you should run late or if you run into any troubles.

2.4 🙁 Encourage discussions by students. Repeat the goals if necessary.

2.5 : On the way back, students discuss the excursion in pairs and distill it to a story using the workbook.

2.6 . Hand out the colorcoded post-it notes where students record their story individually.

#### IN TRANSIT

RETURN

Be back at the Hall before 15.30. Next task starts at 16.00.

- □ Make sure everyone used the same color coding: Someone (yellow), Wanted (green), But (pink), So (orange).
- □ Raphael and Kerrin are available for casual debriefings.

### **∖**Unpack.

This time slot brings the team members up to speed about the experiences had during the excursions. By listening and engaging in short discussions, relating them to each other, the team starts the synthesis process. The post-it sets (Somone, Wanted, But, So) capture an interesting story. Students explain in their own words why they chose this story and what aspect fascinated them. Putting them up, the team starts the 'space saturation' process, filling their walls with tangible information that documents thoughts and experiences.

#### GOALS

- Condense information and convey it efficiently.
- Acquire an overview about key actors and stakeholders within the topic of manufacturing, understanding some specific needs and solutions.

#### MATERIALS

Use the walls in the team space to hang up the story post-its.

#### TUTOR ROLE

Moderate and keep time. Make sure all team members speak equally. Make sure the stories told are well documented on the walls in the team space.

#### PROCEDURE

1.1 Make sure everyone uses the same color code. Explain the goals and timing of the next two steps.	<b>1.2</b> → Everyone shares his/her story while the others then probe for more information. Balance out time.	1.3 * They redistribute and cluster the post-its so that it makes sense to the team. Add labels, descriptions.
16.00	16.05	17.20
5	, 1H	115' 10'
TIMING		

Flexible, allow for 1h30'. Use timeline as a guide.

### **Draw stories. Template.**

Learning how to take decisions as a team will be crucial in order to be productive during the week. Time pressure helps this process. Consider this slot a dry-run for more important decisions to come later. Condense the large set of observations to the 3 most significant stories and visualise them into 3 comic strips. Students are allowed to mix and match stories from different excursions.

#### GOALS

- Take decisions as a team.
- Visualise information creatively.
- Identify connections, systems thinking.

#### MATERIALS

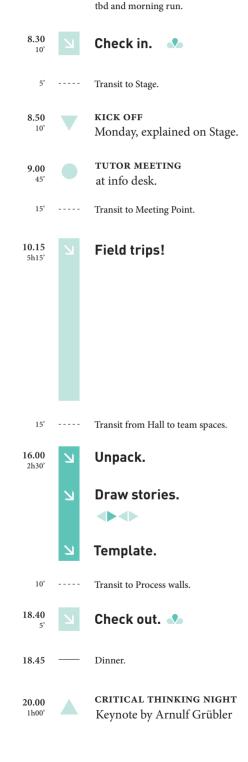
A4 paper, to stick to the Monday template.

#### TUTOR ROLE

Keep time. Moderate the discussion. Make sure they take the decisions in time. You may suggest a tool to speed up the process. Point out connections below stories.

#### PROCEDURE

2.1 🔅	2.2 <>	2.3 📫
Moderate the	In parallel, have	They explain them
selection process	students (in	to one another.
so that students	subteams) produce	Make sure stories
manage to choose 3	the 3 comic strips.	are understandable.
stories.	Use text to make	
	ideas clear.	
17.30	17.45	
15	,	30'
TIMING		
Flexible, allow for 45?		



Sports at ASVZ.

7.05

\_\_\_\_\_

- □ Leave the team space in time for dinner which is served at 18:45.
- □ Remind the students to register for sports before 20.00.

The three comic strips contain the essence of the discussions of the day. Stick them onto the daily template. Hang them up at the ETH Week Hall where they will be ready for tomorrow's Check in.

#### GOALS

- Visualise the results of the day onto the template.
- Understand to work under time pressure.

#### MATERIALS

Monday template.

#### TUTOR ROLE

Moderate the discussion. Keep time. Guide the template completion process.

#### PROCEDURE

3.1 🙁	3.2 📫
They finish the	Wrap up the day.
comic strips and	·
hang them onto the	
template	

3.3 🙁 Walk back to the ETH Week Hall to hang the template back onto the Process wall.

#### 18.15

#### TIMING

Flexible, allow for 15'.

Break for dinner at 18.45.

15'

## Tuesday. Funnel.



# **Prepare for** fair.

Students prepare for the knowledge fair in the afternoon. They work in pairs, choose one of the five areas and decide what they are going to ask the actors and stakeholders. They prepare at least 5 questions per expert.

They brainstorm questions, identify and group themes, then establish an order to allow for the discussion to flow naturally and so that they get answers to the following questions: What is the expert trying to solve? How are they solving it? Why are they doing it in this way?

#### GOALS

- Build on the knowledge from the excursions.
- Identify links between the topic talks, the actors, and stakeholders of the fair.
- Learn how to prepare an interview.

#### MATERIALS

Workbooks.

#### TUTOR ROLE

Oversee progress. Moderate the discussion about the strategy. Explain the procedure of the knowledge fair in the afternoon.

#### PROCEDURE

1.1 Split team up into pairs (or one group of 3 if necessary). One pair per area. If you only manage to cover 4 areas, let us know.	<b>1.2</b> : Oversee how the teams prepare questions. You may call a short team discussion midway.	1.3 Discuss the strategy and expectation of what to bring back from the fair. Wrap up on the way to Knowledge Fair.
12.30	12.35	13.15
5	,•••••••••••••••••••••••••••••••••••••	,

TIMING

Strict, allow for 50'. Use timeline as a guide.

### **\** Knowledge Fair.

During the knowledge fair, we have invited 25 representatives from business, research, administration and non-governmental organisations. By getting access to this network, students get a multiplexed understanding and benchmark of the current best practice examples in the field.

The knowledge fair is organised in 5 areas. Each area has 5 booths. Students rotate in pairs, visiting 4 of the booths, one at each of the 4 rounds. Each pair remains in the selected sector.

After a short elevator pitch, the students are required to engage in a discussion and lead the conversation, getting answers to the interview questions prepared in the morning.

Students record information in three categories (buckets): actors, needs, insights. They form the ingredients of a problem statement.

The students are also encouraged to take contact details for followup questions on Wednesday afternoon.

#### GOALS

- Connect the challenges of the morning session to specific solutions.
- Close the knowing-doing gap to find solutions for manufacturing related problems.
- Identify and cross-check ideas for solving problems.

#### PROCEDURE

	2.1 :	2.2 •)	2.3 📫	2
	Each pair goes to	The invited actor or	Together with the	Г
t	their topic and	stakeholder of one	students from the	n
]	picks a first expert	booth gives a short	other teams at the	t
1	booth, 3 pairs max	elevator pitch.	booth, students lead	S
]	per booth.		the discussion.	b
				n
				f
	13.30	13.40		1
	10'	3'	14'	•
	TIMING			

Strict. Switching occurs on acoustic signal.

Remind students to ask experts for their business cards and if they could send them an email before noon on Wednesday to arrange a phone call later that afternoon for follow-up questions.

#### MATERIALS

Students use workbooks to document discussions. Business cards.

#### TUTOR ROLE

During the knowledge fair, you don't have an active role. You may take a break or stick around to monitor the progress of your students.

2.4 : The acoustic signal marks the end of the round. Students switch to the next booth. A free market approach if facilitated.	<b>2.5</b> • The steps <b>2.2–2.4</b> are repeated 3 times.	<b>2.6</b> : We thank the external partners of the fair. Students take a break and stick around for the informal Networking Event.
13.57	14.00 14.20 14.40	15.00

□ Raphael and Kerrin are available for casual debriefings.

### **Unpack.**

This time slot brings the team members up to speed about the experiences of the knowledge fair. Similar to the unpacking process after the excursions, we work again with post-it notes to categorise the gathered knowledge from the interviews into three 'buckets': actors, needs, insights.

#### GOALS

- Cluster information into categories (actors, needs and insights) and convey it efficiently.
- Identify how the different problems relate to each other, add structure help define what to focus on later.

#### MATERIALS

Color-coded post-it notes, one color per bucket: actors (yellow), needs (green), insights (pink).

#### TUTOR ROLE

Time keeping. Moderation. Make sure everybody gets to speak equally.

#### PROCEDURE

	Identify interesting links.
16.00	16.30
1	16.00

TIMING

Allow for 1h30 in total. Use timeline as a guide.

### ↘ Problem statement 1.0.

The buckets are the ingredients of a problem statement. Actor – need – insight. From all the knowledge unpacked over the last two days, we produce a first set of problem statements in pairs and then decide as a team which one has the most potential and inspires all members of the team. It will be a very first draft that will be improved continuously. The first version can be simple. Follow the criteria to define scope and make sure all ingredients properly relate to each other.

#### GOALS

- Take decisions during a first define round quickly.
- Practice how to formulate a problem statement.

#### MATERIALS

Workbooks.

#### TUTOR ROLE

Time keeping. Moderate the decision process.

#### PROCEDURE

2.1 :	2.2 🌒	2.3 📫		
Have students	Each pair shar	es Moderate a		
work in pairs	their problem	discussion s	discussion so they choose one problem statement (can also	
to formulate a	statement with	the choose one		
problem statement	others.	statement (c		
using the		be a combin	ation).	
workbook.				
17.15	17.35	17.45		
2		10'	30'	
TIMING				

Allow for 1h in total. Use timeline as a guide.



Hall closes at 23.00.

- □ Leave the team space in time for check out at 18.40.
- □ Remind the students to register for sports.

### **∖** Template.

The result of the day is a first problem statement that will guide the ideation process on Wednesday. For each bucket (actors, needs, insights), copy 5 to the template. All other discussions and problem statements are documented on the walls in the team space. In this way, they remain part of the process to refer back to them later or integrate them into novel ideas. Hang up the template in the ETH Week Hall where they will be ready for tomorrow's Check in.

#### GOALS

- Archive the results of the day onto the template.
- Capture wider results of the discussions on team space walls.

#### MATERIALS

Tuesday template.

#### TUTOR ROLE

Moderate the discussion. Keep time. Guide the template completion process.

#### PROCEDURE

#### 3.1 \* They finalise the language and write the problem statement onto the Wednesday template.

**3.2** Add other problem statements as separated elements:

actors, needs,

insights.

#### 3.3 📫

Wrap up the day and walk back to the ETH Week Hall to hang the template back onto the Process wall.

#### 18.15

#### TIMING

Allow for 15'.

Walk to Process walls at 18.30.

15'

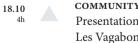
### Wednesday. Define.

7.05 Sports at ASVZ. tbd and morning run with Sarah M. Springman (Rector). 8.30 Check in. ----Transit to Stage 8.50 KICK OFF Tuesday, explained on Stage. TUTOR MEETING 9.00 at info desk. 15' -----Coffee & transit to Team spaces 10.00 Ideate. 1h45 4 4 11 45 Lunch break

12.30 Research and test.

↘ Template.

<sup>40'</sup> ----- Transit to Brache Guggach.



**СОММИЛІТҮ NIGHT** Presentation by Les Vagabonds d'Énergie.

#### □ Reach out to experts before noon.

- □ Remind the students to be back in team spaces by 12.30.
- □ Prepare paper and markers for upcoming brainstorming.

### **∖** Ideate.

After establishing a first draft of the problem statement, it is time to explore if it holds and is productive. We therefore ideate in two steps. First we brainstorm, exploring solutions that answer to the problem statement. The goal is not yet to develop good solutions but to get the obvious solutions out of the heads to go beyond them. Ideas are generated, selected, and clustered, then they reflect on the problem statement. This is repeated twice. The result of the first step is an improved problem statement and clusters of ideas.

#### GOALS

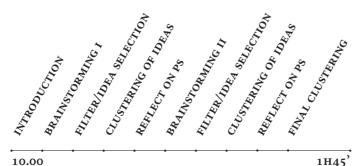
- Rephrase your first problem statement.
- Generate ideas instead of evaluating them.
- Probe and clarify different aspects of a solution.
- Bring abstract ideas onto paper so they become shareable.

#### MATERIALS

Plain A3 paper. Use the standing tables. Place a problem statement in the center. 15 paper sheets per student (size: 1/3 of A4).

#### TUTOR ROLE

Keep time, moderate the feedback round, ensure that everyone can share his/her opinion on the clusters.





TIMING

Use facilitator instructions as a guide.



ALICE REPETTI is a Social Scientist with a background in Economics. She has experience in designing research projects and facilitating training programs using collaborative and agile techniques. Her ambition is to explore new ways to integrate Technology, Innovation and Design into effective strategies to create social change and shape new educational approaches.



HAZEM AHMED is a doctoral student at the Institute of Pharmaceutical Sciences, ETH Zürich. Hazem obtained his Bachelor's degree in Pharmacy and Biotechnology in Egypt. He oscillated between academia and industry before joining ETH Zürich. He is attracted to negotiations, project management and has a passion for challenges and solving problems.



MARTIN COUL was one of the first employees at the consortium that established the smartphone industry and subsequently played a key role in establishing Skype's mobile presence. Today he is an Entrepreneur in Residence at ETH Zürich and leads client engagement activities for Spark Works. He holds a Business Studies degree from the University of the West of England - and just so happens to make the best burger you'll ever taste! E

BARBARA SCHNYDER holds a Master's degree in World Society and Global Governance. She worked as journalist and researcher in an interdisciplinary think tank engaged with global trends in business, science and society before she joined Spark Works as an Innovation Consultant.



JOSE ARRIETA is a Costa Rican, physicist and electrical engineer, turned Innovation Management doctoral student after coming to Zurich. Jose studies the process of how managers and entrepreneurs solve strategic problems, and develop routines in dynamic environments, in the hope of helping in fostering creativity.



MATTIS STOLZE holds a Master's degree in Mechanical Engineering. He was part of several engineering design teams, mentored student projects and worked with NGOs in Switzerland and Nepal. Being genuinely interested in people's stories, and in tailoring products to user needs, he made the transition to user-centered product development and currently works at Spark Works.

Hall closes at 14.00.



EVA AHBE studied Physics with a focus on Environmental Science in her Bachelor's and Master's studies. Driven by the wish of working on solutions for climate change she switched to Engineering in her PhD, where she is now engaged in the automatic control of a novel wind energy technology consisting of power kites.



LINDA ARMBRUSTER holds a Master's degree in Strategic Design from the design akademie Berlin. As Project Manager at Spark Works, a strategic human-centered innovation firm, she builds and leads inspiring research and advisory programs with interdisciplinary teams to tackle complex challenges in the private and public sector.



MARTIN BUTTENSCHÖN studied Management, Technology, and Economics at ETH Zürich, investigating automation by Artificial Intelligence for his Master thesis. He has a background in Engineering Physics and is passionate about collaborating with others to innovate technology. Last year he participated as a student at ETH Week and he is back to facilitate others to have a great experience.



WILFRED ELEGBA is a final year doctoral student in Plant Science and Policy at ETH Zürich. He loves working with interdisciplinary teams to help tackle everyday problems of society. This is the third time he is participating in ETH Week. He also enjoys working on social intervention projects such as the EquipSent, an initiative which focuses on improving teaching and research in underdeveloped countries by donating unused but functional equipment from ETH Zürich.



**SOPHIE BERNHARDT** holds a Master's degree in Design Management and is an experienced facilitator having designed and lead a variety of Design Thinking workshops around the world. She is a storyteller able to translate abstract insights into sustainable solutions and passionate about co-creating scalable innovation strategies □ Raphael and Kerrin are available for casual debriefings.

### N Research and test.

Students will deepen their understanding. For this, they split up to work in parallel. Some do literature and online research to back their assumptions with facts and figures answering to the scientific rigor part of the brief. Others test the problem statement and the idea sketches with the experts they contacted in the morning. Others test with non-experts on campus or on the street, answering the feasibility part of the brief. All then come back and share the feedback with the team.

#### GOALS

- Understand how to build on other people's knowledge.
- Open up to feedback and be critical about it to evaluate your own ideas.

#### MATERIALS

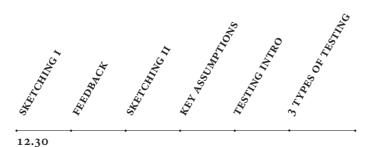
#### TUTOR ROLE

TIMING

assist with research, ensure a smooth process.

#### FACILITATOR ROLE

Clarifications, help unpacking.



Workbooks. Post-its and team space walls.

Separation into subteams, time keeping. Moderate unpacking,

Use facilitator instructions as a guide.

TIMING Use facilitator instructions as a guide.



COMMUNITY NIGHT 18.10

Presentation by Les Vagabonds d'Énergie.

### **Problem** statement 2.0.

Students continue working in parallel subteams and simultaneous-The Wednesday template contains the problem statement 2.0 as ly refine the problem statement and the idea sketches. Combine well as 2 selected ideas and the building blocks to answer the or discard sketches based on the feedback so that only one sketch questions in the brief for scientific rigour and feasibility. Hang up the template in the ETH Week Hall where they will be ready for per subteam remains. They then rephrase and refine their problem statement. Make sure they become more precise, the link between tomorrow's Check in. insight and need are clear and they continue to fulfill the criteria.

#### GOALS

- Fall in love with the problem, not with the solutions.
- Clarify and deepen problem statement and idea sketches.

#### MATERIALS

Paper.

TUTOR ROLE

Cho Cho

Time keeping. Clarify process.

#### FACILITATOR ROLE

Clarifications, help framing the problem.



ACCENTING OF

APOPPEN STATEMENT.

- $\Box$  Make sure the template is ready by 17.30. Leave it in the team spaces and hang it up next morning before Check in (Tutor is responsible). Check out will happen informally during the walk to Brache Guggach.
- □ Remind the students to register for sports before 20.00 at bar on Brache Guggach.

### **∖** Template.

#### GOALS

- Visualise the results of the day onto the template.
- Capture wider results of the discussions on team space walls.

#### MATERIALS

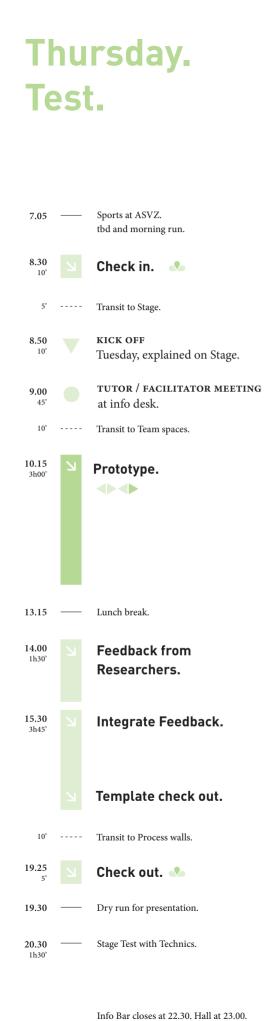
Wednesday template.

#### TUTOR ROLE

Moderate the discussion. Keep time. Guide the template completion process.



5ноо'



- □ The pavilion boxes with additional prototyping material are under the styrocutters. Bigger prototyping material is located in each entrance. Large pavilions have slightly more material, please share!
- □ Remind the students to be back before 14.00 in team spaces.

### **∖ Prototype.**

Prototyping is a chance to make ideas tangible. While they can be very different in format, ranging from a wall of post-it notes, to 3D models, to role-play, the general idea is the same: to gain an understanding of how your solution will function in reality and how it will be experienced from the actor's perspective.

It is an iterative process, they learn to move from intangible ideas to a concrete model. What was unknown when they started off, becomes precise. By making ideas concrete, they also become shareable. The more you go into detail, the less there is a chance for misunderstanding. Therefore, prototypes are valuable conversation pieces and can have their very own rhetorical value.

#### GOALS

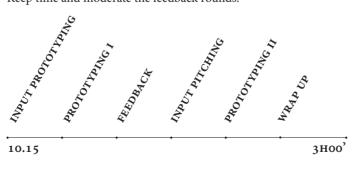
- Use prototyping as a way to refine an idea and take design decisions.
- Use the prototypes to learn how to tell a convincing story.
- Learn the benefits of working concurrently and take decisions to integrate both ideas into a final one.

#### MATERIALS

Prototyping materials are available in pavilion boxes and in the entrance space. The material is shared between all teams. Try to return material to the boxes that you don't need so that others can use it.

#### TUTOR ROLE

Keep time and moderate the feedback rounds.





Use facilitator instructions as a guide.

#### MEET THE RESEARCHERS



PAOLO BURLANDO is Professor at the Chair of Hydrology and Water Resources Management.



KIRSTEN OSWALD works in the management of the Swiss Competence Center for Energy Research.



TOBIAS SCHMIDT is Assistant Professor of Energy Politics at D-GESS.



ALEJANDRO NUÑEZ-JIMENEZ is a doctoral student at the Group for Sustainability and Technology.



MARYAM KAMGARPOUR is Assistant Professor of Automatic

Control Laboratory at D-ITET.

ILLIAS HISCHIER is senior

researcher at the Chair of

Architecture and Building

Systems.





ANSELMA WÖRNER is a doctoral researcher at the Bits to Energy Lab.



26



**ARNO SCHLUETER** is Professor of Architecture and Building Systems at D-ARCH.





D-MAVT.



GABRIELA HUG is Associate Professor of Electric Power Systems at D-ITET.





GLORIA ROMERA is Managing Director of SCCER Mobility.



MARCO MAZZOTTI is Professor for Process Engineering at

NILS WENZLER is a doctoral student in the MaDE group.





ERNST HAFEN is Professor for Systems Genetics at D-BIOL.



**ULRIKE GROSSNER** is Professor of Power Semiconductors at D-ITET.



GEORGIOS MAVROMATIDIS is a postdoctoral researcher at the Chair of Building Physics.



MARIE FRANCINE LAGADEC is a postdoctoral researcher in the MaDE group.



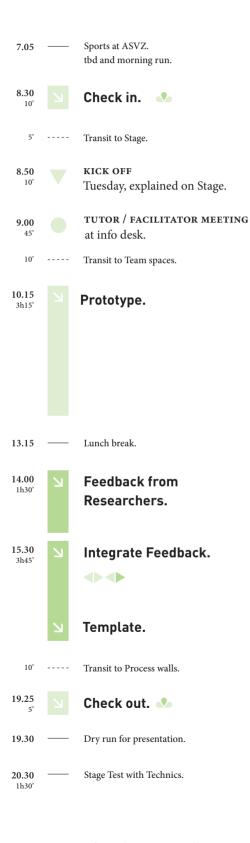
OLGA WEISS is a postdoctoral researcher at the Energy Systems Group



**PRASAD RAMAKRISHNAN** is a lecturer on Innovation and Leadership at D-MTEC.



JAMES ALLAN is a postdoctoral researcher at Empa.



□ Kerrin and Raphael are available for casual debriefings.

# See Feedback from Researchers.

The feedback is organised in three rounds so that researchers can visit three teams, one after the other. Your team will get to present their prototype during one of the three rounds. Use the remaing time to continue working on your project. Also, make use of this time to think about the last part of the brief: systems thinking.

#### GOALS

- Practice how to present their ideas concisely in preparation for the final presentations.
- Learn how to make sense of feedback and draw conclusions for what this means in regard of improving the project.

#### MATERIALS

You may bring your templates from the hall for the feedback. Use a feedback capture grid: What was good, constructive criticism, questions for clarification, new ideas sparked.

#### TUTOR ROLE

Keep time. Help students document the feedback.

#### PROCEDURE

2	5'5'	25'5'	25
prototypes to the researchers. Link to the problem statement that you are trying to solve 14.00		working on projects. 15.00	your
Explain both prototypes to the	1	working on	

Strict. 25' for each slot. 5' break in between.

# **∖** Integrate Feedback.

Once they've been given feedback, the team unpacks and selects its final idea. They make a plan and distribute the workload to best answer the brief. Adapt the problem statement if necessary, refine the prototype and the story. Carry out the remaining research and answer all critical reflection elements of the brief.

#### GOALS

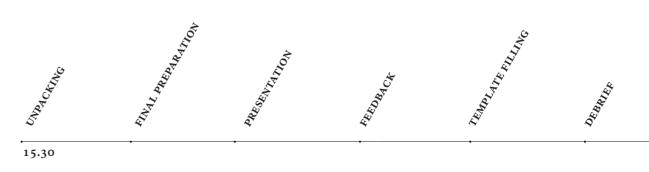
 Learn how to delegate, organise and coordinate in order to complete all tasks before the final presentation.

#### MATERIALS

Whatever works for you.

#### TUTOR ROLE

Moderate the decision process if necessary, help divide tasks between the team members. Timekeeping.



TIMING

Use facilitator instructions as a guide.

Info Bar closes at 22.30. Hall at 23.00.

- □ Remind the students to register for sports.
- □ Remind students of the dry run at 19.30 and the technics test at 20.30.
- One tutor and one student from each group meet with Lukas, Christian and Alan for the final meeting.

### **∖** Template.

The Thursday template contains the documented feedback from the experts, as well as both presented solutions. Also, add at least one aspect for social, economic, ecological and political aspect to the systems thinking questions of the brief. Repeat the problem statement. Hang up the template in the ETH Week Hall where they will be ready for tomorrow's Check in.

#### GOALS

- Visualise the results of the day onto the template.
- Capture wider results of the discussions on team space walls.

#### MATERIALS

Thursday template.

#### TUTOR ROLE

Moderate the discussion. Keep time. Guide the template completion process.

3Н45'

## Friday. Communicate.



- Pick up the voting objects for your students at Info desk. Distribute them just after the final presentations.
- □ Pick up the list that will define in what order teams will present this afternoon.

# **Polish your** presentation.

Before finishing up, the team checks the brief one last time and makes sure that all questions are answered and the focus is clear. Students stick to their problem statement, finish working on their prototypes, continue preparing their presentations and answer all questions of the brief.

#### GOALS

Students learn how to rely on each other and wrap up a project in time.

#### MATERIALS

Whatever works for you.

#### TUTOR ROLE

You continue without the faciliators. Moderate the discussion about the brief. Then keep time and help coordinate.

1.2B 🕨

Have other sub-

teams work on

questions of the

brief. Or organise in

2H15

answering the

a better way.

PROCEDURE

1.1 ☆1.2A ◄Discuss how to<br/>organise during the<br/>last 3 hours. Make<br/>a plan for the day.<br/>Double-check the<br/>brief.1.2A ◄Work in sub-teams<br/>to to finish the<br/>prototype, polishing<br/>specific arguments,<br/>and writing the<br/>overall narrative.

### 10.15 10.30 15<sup>°</sup>

TIMING

Flexible. Allow for 2h30' in total.

- Make sure your teams space is clean: no more paper on the floor or on walls, store your tolls and materials
- □ We would like to store and then reuse the prototyping material next year, so please sort trash from usable stuff.

### **∖** Practice.

We rely on you to make the final event possible. Simulate the procedure as described under the Final Presentations slot so that we can get 180 people on and off stage in less than 3 hours. Include the logistics of the event, when you need to prepare, how much time you have to get on stage, and when you receive the '1 minute left' notice. Also clap when the time is up to find an elegant way to wrap up in case you should run over time.

#### GOALS

- Become comfortable with the final presentation
- Practice not only what you say but also how you say it.
- Understand the logistics of your presentations to best use the time you hava available.

#### MATERIALS

A timer, your prototype.

#### TUTOR ROLE

Keep time, make sure team understands logistics.

#### PROCEDURE

2.1 🔅	2.2 🔅	2.3 •)
Make sure t are done wit prototype, t ingredients final poster presentation	th theclean up theheworkspace, sortfor theleftover materialsand theinto the labeled	Students rehearse their story. Stay under 5' and clap when the time is over to simulate the real thing. Wrap up.
12.45		

- □ HAND IN: All digital files: for the screens during the presentation and the 1-pager need to go to InfoBar.
- □ Process templates and prototype (if you don't use it on stage) go to the <u>process wall</u>.
- □ Props for presentation to the <u>backstage area</u>.

## **∖** Last Template.

The Friday template complements the final prototype so that it is understandable without your performance on stage. Therefore write out the final problem statement, explain the solution and prototype in written form, and give final answers to the questions of the brief.

#### GOALS

Document your ideas so that they can be archived after ETH week and work without your presentation.

#### MATERIALS

Friday template.

#### TUTOR ROLE

Moderate the discussion. Keep time. Guide the template completion process.

2.4 : In parallel, potentially in pairs, hand in the prototype at the stage in the ETH Week Hall. 2.5 : Finish the last template and hang it up to complete the Process wall. Document it.

**2.6 :** Hand in all digital files before 13.30 at the Info Desk and props in the backstage area.

13.15

30'

15'



# **Final** presentations.

All teams get to go on stage. Each team has 5' to present their project. At the end of the

#### GOALS

- Explain something complex in a simple way with a clear message using a compelling visualisation.
- On the other hand, show the foundation and the result of your research, proving your ability to think critically.
- Act as a team.

#### MATERIALS

The prototype (if you want), props, no powerpoint.

#### TUTOR ROLE

Assist your team and clap as loud as you can.

 Distribute voting objects (lustre terminals) just after the final presentations.
 Students cast their vote for the peer to peer award before 18.15.

#### LOGISTICS

In order to avoid collisions, make sure that your team gets up right when team x-2 is done with the presentation and you hear the applause. Don't get in their way when they go off the stage, you will be using the same door. Then follow the procedure below until you are seated again during the time that team x+1 presents.

During the dry-run on Thursday evening, we will explain this again live, so that you get a feeling for the space.

#### PHOTOS

After the closing ceremony, our photographer will be present to take pictures of all teams and tutors.

PROCEDURE	

**1.1** ----Team x-2 is done. Applause. Team x goes to the backstage area.

Students (team x) organises props quietly in the background while team x-1 presents.

5'

1.2 🙁

**1.3** ---Team x-1 is done. Applause. Team x walks to the stage, gets mic's and gets ready.

2'

1.4 : Team x presents. Time keeper hints when 1' is left. The audience claps when the 5' are up.

4'1'

**1.5** ---Team x walks to the backstage area and leave their props in the same spot as before.

2'

**1.6** ... Team x leaves backstage, sits down quietly before the presentation of team x+1.



Strict. 3h in total with two breaks.

2'

□ If you used your prototype during the presentation, bring it back to your team wall.

## Ŋ Wrap up.

The last time slot of the week is dedicated time for students to reflect their team process and discuss the experiences of the week. The tutor will design this slot together with the trainers in the online phase of the tutor training.

#### GOALS

- Network and to informally exchange ideas about the group process.
- Reflect on our expectations pointed out on day 1.

#### MATERIALS

Depends on how the tutor designs the slot.

#### TUTOR ROLE

Design the slot in coordination with trainers. Lead and keep time.

#### PROCEDURE

<b>1.1</b> Move to a place of your chosing (team spaces are closed). Make sure everyone has already cast their vote.	<b>1.2</b> Wrap up according to what you have prepared during the online phase of the training.	<b>1.3</b> Return to the hall for the panel discussion and the closing ceremony.
18.00	18 15	10.00

18.00	18.15	19.00	
	15'	45'	15'

#### TIMING

5'

Strict 1h15' in total.

Closing ceremony starts at 19.15.



ALEKSANDRA KIM is a doctoral student at Paul Scherrer Institute and ETH Zürich. Her focus lies in the topic of Sustainability Assessment of Swiss Production and Consumption, which brings together data analysis, quantitative modeling and life cycle assessment. She is convinced that diversity fosters innovation and better research, especially in the context of energy and sustainability.



DIEGO C. RUIZ holds a Master's in Nanotechnology from the University of Valladolid and is now pursuing a doctorate at ETH Zürich. In his research he is involved in the manufacturing of high speed electronic devices used in cryogenic amplifiers for deep space communications. In his free time he loves doing all kinds of sports, travelling or going for a walk at the lake.



HELEN MEYER is focusing on product development in her Master's in Mechanical engineering at ETH Zürich. She collected a lot of coaching experience and considers ETH Week as the perfect opportunity to learn more about interdisciplinary and international teams. Besides ETH, Helen loves rock climbing and everything else that combines nature and sports.



ALINA BEGLEY is a Master's student in Chemistry at ETH Zürich with an interest in bioanalytical chemistry. After completing her Bachelor's at University of Leipzig, she volunteered at an NGO in Guinea reviewing malaria diagnostic practices. She is an American who grew up in Beijing, Berlin, Seoul, and Washington D.C. and looks forward to discussing solutions to the worlds biggest problems.



#### ENRICO SCOCCIMARRO is a Materials Science Master's student at ETH Zürich. He is intrigued by product development and seeks an interdisciplinary approach to innovation. In his free time he is split between skiing in the mountains, sailing at sea, and enjoying home made drinks from his 'gin & tonic lab' with friends.



JOHANNA THEILMANN is a Master's student in Environmental Science with a focus on environmental policy and renewable energies. She is particularly interested in climate change and the interaction between natural science and society. In her free time, she enjoys travelling, cooking, baking, drawing, discussing politics and spending time in nature.



CHRISTOPHER MCLAREN has a Master's degree in Mechanical Engineering from ETH Zürich. He is currently working on his doctorate in Mechanical Engineering specialising in non-Newtonian fluids. In his free time he enjoys a variety of outdoor sports, kite surfing, swimming, hiking, and also dancing.



FABIO BARGARDI holds a Master's degree in Materials from ETH Zürich and is currently a doctoral student in the Complex Materials group studying Lithium ion batteries. He is a member of teampact, which is a group of students offering coaching sessions and focusing on ideation processes, project development, and team dynamics. In his free time Fabio likes swimming and paddling.



Bachelor's in Graphic Design from the HSLU Design & Kunst. She is a trained Design Thinker from ETH Zürich, develops the internal visual communication at Spark Labs and supports Spark Works in design and consultancy projects. She enjoys working and experimenting with different design methods to find new, effective ways to communicate. CHRISTOS GLAROS grew up in

Bremgarten, just a stone's throw away from Zurich. After an exchange semester in Sweden he is now working on his Master thesis about batteries to complete his Master's degree in Materials Science. He is in general interested in all kinds of materials related to energy generation, storage and conversion.



FLORIAN EGLI is a doctoral candidate in the Energy Politics Group at ETH Zürich. He is passionate about tackling climate change and currently working on renewable energy finance. He also is the vice-president of foraus, a Swiss foreign policy think tank, he regularly moderates workshops, and gives talks. He is looking forward to an exciting week full of new ideas!



MAXENCE RYAN is a Master's student in Integrated Building Systems. After studying Architecture at Stanford University and working in Berlin, London and Zurich, he is now passionate about energy efficiency in buildings, decentralised energy distribution, and alternative building materials. In his free time, Max enjoys hiking, baking bread and napping with his two fat cats.



MICHAEL LIEM holds a Master's degree in Mechanical Engineering and has just started his doctorate at the Institute of Fluid Dynamics. In his free time, Michael enjoys playing Volleyball and hiking. He is a member of the coaching network 'teampact', where he exchanges coaching experience with like-minded students from different



MÜGE ÖZLÜTIRAS is currently an MA candidate in Comparative and International Studies at ETH Zürich. Curious about sociology, culture and art, she wishes to create value for the world as a political scientist. She is passionate about languages and speaks Turkish, French, English, Italian and is learning German.



SEBASTIAN KRUMMENACHER is a Mechanical Engineering Master's student at ETH Zürich. His interest in team dynamics lead him to write his Bachelor thesis about success factors in teams. He is excited to accelerate the team process of students from diverse back grounds that have the courage to come together, think about todays challenges and make an impact for tomorrow.



MARCEL NEIDINGER is a Master student at D-INFK specialising in information systems. His main interest is in the application of machine learning systems to medical and sport-scientific problems. When not studying Marcel spends most of his time swimming, biking or running training for long distance triathlon.



OLENA BERKOVSKA is a Master's student in Pharmaceutical Sciences. She has enjoyed an international upbringing and came to Switzerland for her studies. She is currently conducting research in drug delivery, which is supporting her passion for interdisciplinarity and innovation.



SILVIA BURGDORF is a Master's student in Environmental Science at ETH Zürich and is currently doing an internship at the Swiss Association for Recyling of building materials (ARV) in Zurich. During her studies she focused on humanenvironment conflicts, gained experience in tutoring in the lecture 'Environmental Problem Solving' and now has developed a great interest in Design Thinking.



MARTIN HOLUB is a Master's student in Mechanical Engineering at ETH Zürich where he specialises in Bioengineering. His mission is to bring more engineering into biology and vice versa. When he is not hacking on Arduino projects or training a machine to learn models, he keeps himself away from the computer by cooking and doing sports.



MATTIA MÄDER is a Swiss-Belgian Master's student at ETH Zürich who grew up in the "capital" of the European Union. He is interested in the complexities of the energy sector and focuses on policies to make it more sustainable. He is excited to meet the motivated, creative and diverse minds getting together at ETH Week.



SANDRO KALBERMATTER grew up in Brig-Glis in the south of Switzerland. He is currently finishing his Master's degree in Computer Science. In his spare time, he builds little robots, runs tasks for several student associations and does technical projects with children and teenagers. He loves music, nature and technology and he's always up for a swim in the Limmat.

YOUR TWO TUTOR TRAINERS:



KERRIN WEISS is in the last year of her Master's degree in Mechanical Engineering at ETH Zürich with a focus on Biomedical Engineering and Product Design.



RAPHAEL PORTMANN studied Environmental Sciences at ETH Zürich and he tries to live by his convictions and ideals. Currently, he's working on his doctorate.



SABINE PYTHON has a background in Mechanical Engineering and is a Master's student in Integrated Building Systems. She thinks it brilliantly mixes engineering, architecture and sustainability. Sabine is active as president of L-Punkt, the student organisation for lesbian, bi and queer women, and cycles through Zurich as a passionate bike messenger. ☐ Thank you for your dedication to the tutor role. We are looking forward to celebrate a successful week with you on Friday.