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1 Introduction

A description of the target groups has to be agreed by the partners for content development, taking into consideration the varying education and vocational training systems in European countries to be able to ascertain a minimum entry requirement for each module produced. This forms the basis for the selection of topics and module design in D1.2 and WP2.
The present document summarises the rationale for selecting the target groups and the type and level of education required. The rationale was laid out in the January 2018 meeting and discussed among partners. Then a survey was set up the feedback of which was discussed in March 2018. This document was then completed in a version by May 2018. In the final upload it was decided to include the survey questions.
TeacHy provides education, full courses, course modules, and on-line learning for a wide audience. It specifically addresses the supply of undergraduate and graduate education in FCHT. One focus is with engineers and other professionals as target groups (3 yr bachelor education), in order to prepare and train the future workforce that will be needed in the growing FCHT field. A main project goal is to build a 1 year master course, accessible to master students from all Europe, hence they clearly form a main Target Group. These are university master graduates from scientific or engineering fields and disciplines (a degree usually obtained after 5 years of higher university education). Most educational material on this level already exists (with the project partners already teaching courses in the field). A detailed and exhaustive curriculum for FCHT-related topics has already been compiled in a former EU project (**TrainHy**), which TeacHy builds upon to construct the 1 year master course, and other education programmes for other audiences.
In addition to collecting the teaching and training material, on an electronic platform, and composing the 1 year specialisation master course for Target Group 1, TeacHy thus also uses the momentum that the electronic platform can become a single repository for accessing FCHT information by a wider range of target groups, from the general public to professionals, that can benefit from the resources of the project.

2 Methodology to determine Target Groups

The underlying idea is to provide teaching in the form of modules that can be chosen in a free or recommended order to make up a complete course, depending on the needs of different target groups. Modules include the basics, specializations and practical training. The modules are accessible from an online webtool built in the project. A module is typically 2-4 ECTS, where 1 ECTS is 1 weekly hour of teaching with one more hour home work needed from the student. A course is a set of modules leading to a degree, certificate or other qualification. A full semester is equivalent to 30 ECTS points.

To determine potential Target Groups, first a list was dressed as exhaustive as possible. This list is reproduced in this report (Tables in §3). Following a qualitative discussion within the consortium on this list, a questionnaire was prepared and sent out to the consortium partners to source everyone's views more quantitatively. The questionnaire is also reproduced in this report (§4). From the feedback and further follow-up discussions during meetings, Target Groups were finally ranked and prioritised.

For each identified Target Group a recommendation is given for suitable modules and a relevant potential course to be built from modules.

3 Initial Target Group list

A first effort dressed an exhaustive list of all potential target groups, given below in 3 successive tables. A description of these tables is given as follows.

Column 1,2: Target Group number and name (TG)
Column 3: definition of the TG
Column 4: preliminary priority suggested for each TG.
Column 5: training could be offered as 'initial' (typically as a course, 'C'), or as 'continued' (typically for specialised module(s), 'M'). In this way some TG can be addressed twice (A,B).
Column 6: a course or module(s) can be chosen by the participants themselves, or by the participant's employer, or by a University (that would compose a course from available modules on the platform, to offer that course to its local students).
Column 7: proposed teaching form, or comments, for the TG.

Going through the list, it appears that several TG could be addressed in a similar way, i.e. with a similar type of M(odules) or C(ourses), such as TG1 (bachelor tech. engineers) and TG4 (vocationally trained graduates) and TG5 (industry technical personnel).

	Target group	Description	TeacHy Priority	Training	Course/ Module/ Other	Chosen by	Proposed teaching form. Comments
1A	B. Eng	graduated tech. engineers (3 yrs)	1	Initial	C	Partic. Empl.	1 yr FCHT master course, custom-designed to this group
1B	"	*same* (similar to Groups 5,6)	2	Continued	M	Empl.	selected modules, e.g. H_2 safety, FCH applications,…
2	B Sc	undergraduate 1st, 2nd, 3rd yr university bachelors	3	Initial	M	Partic. Univ.	selected modules, e.g. electrochemistry,…
3	M Sc	graduated univ. engineers (master; 5 yrs)	1	Continued	C	Partic.	1 yr FCHT master course, custom-designed to this group; = a 2nd masters degree as a specialization year (**a main objective of TeacHy**)
4A	Techni-cians	vocat. training graduates, trained professionals in industry	1	Continued	M	Empl. Partic.	selected modules, e.g. characterization methods,..
4B	"	*same*	1	Initial	C	Empl.	a ½ yr or 1 yr technical FCHT course, custom-designed to this group may be similar to 1A

It further appears that M(odules) are indeed a practical way of compartmenting and covering teaching material for offering to a broad spectrum of TG (see TG1,2,4,5,6,7).

In terms of priorities, the initial appreciation is to emphasize the TG of master graduates (for whom a 1 yr course is built), as well as the 'technical engineers' from TG 1and 4; the latter are likely readily addressed with well-chosen M(odules).

	Target group	Description	TeacHy Priority	Training	Course/ Module/ Other	Chosen by	Proposed teaching form. Comments
5	Industry personnel	trained professionals in industry, from technicians to scientists	2	Continued	M	Empl.	selected specialized modules to learn a specific skill, technique, method, tool, software,… applied in FCHT
6	Employees from industry & other businesses	technicians, project engineers, managers, economists, …	3	Initial	M or short C	Empl. (Partic.)	selected specialized modules for this target group, e.g. market&business dvpmt, FCH-applications,…; alternatively short Introductory/ Overview courses of 1-5 days
7	PhD students	from science disciplines	2	Continued	M or short C	Partic. Univ.	Doctoral School Courses of x ECTS (e.g. 1-week Summer School), either Introductory/Overview (for 1st yr PhD students), or more specialized (for 2nd/3rd yr PhD students: specific method or tool, e.g. modeling…)

	Target group	Description	TeacHy Priority	Training: Init./Ctd.	Course/ Module/ Other	Chosen by	Proposed teaching form. Comments
8	Politicians, 'stakeholders'	people with power (decision, legal, financial, strategic, ...)	3	Initial	Other	Partic.	Factsheets on the importance and impact of FCHT, 1 to 2 A4 pages max
9	General public	any interested citizen	3	Initial	Other	Partic.	Factsheets, flyers, brochures, on the working principles and applications of FCHT, their importance and impact, in layman's terms
10A	High School teachers	as is	3	Initial	Other	Schools	Illustration/Demonstration videos and experiments which teachers can use as teaching material in their class
10B	High School pupils	as is	3	Initial	Other	Schools	Illustration/Demonstration videos and experiments which school children can visualize and play with; 10A and 10B may be identical
11	Outreach	Professors and other teachers in Africa, Central- and South-America, Asia, ..	3	Initial	Other, MOOC?	Schools, Universities	Bringing EU-flavored FCHT education material to the world, e.g. with a MOOC

4 Target Groups survey. Topics / Modules

To structure the survey, we reduced the above list (§3) to 8 target groups (grouping TG5-6 into 1), with different needs and levels of know-how that require a guided access to adapted educational material, be it with certain overlaps between TG. High Schools (TG 10 in Tables §3) were addressed in a separate new FCHJU Call in 2018. 'Outreach' (TG11 in Tables §3) can form part of the follow-up post-TeacHy. The 8 retained TG are:

1. Master graduates (MSc/MEng) – usually 5 years of higher university education in science or engineering
2. Graduated technical engineers (BEng) – usually 3 years of higher education in engineering
3. Technicians (vocationally trained) – usually 3 years of vocational training
4. Employees and professionals from industry and businesses
5. PhD students – in their 1st, 2nd, 3rd PhD year
6. Bachelor students – in their 1st, 2nd, 3rd year of Group 1 or 2
7. 'Stakeholders' (to be defined and selected)
8. General public

There are 3 different delivery forms of adult education, depending on the TG:

1. a full course of a number of ECTS leading to an accredited degree (usually min. 6 months, and up to 2 years); TG1-3
2. short courses or individual topics (modules) leading to a certificate (a few days, up to 1-2 weeks); training can be 'initial' (1st contact) or 'continued' (specialisation); TG4-6
3. as brochures, leaflets, videos, factsheets etc., for easy access to a wide audience including non-professionals and the general public; TG7-8

Examples of modules of FCH-technology topics are:

- Thermodynamics
- Electrochemistry
- Charge transport
- Defect chemistry
- Fuel Cell types
- Applications of FCHT
- H_2 technology (basics, H_2 economy, production, storage, ..)
- Other fuels
- Low Temperature FC
- High Temperature FC
- FC & Electrolysis characterisation methods (iV, EIS, stack, system, in situ,..)
- H_2 safety
- Regulations/Codes/Standards
- Modeling
- FC History
- Politics
- LCA/ environmental issues/recycling
- Market & business development

The Questionnaire that was circulated to consortium partners is reproduced below.

Target group 1: **Masters in engineering or science (5-year university graduates) – TeacHy delivery: full course**

Main target group in TeacHy, for whom a special 1 year master specialisation course (60 ECTS credits in total, 2 semesters of 30 credits) is developed and delivered, based on training material available with the project partners.

Q1.1. Should this course contain practical lessons, i.e. in a teaching laboratory (which several Universities could offer locally)?

- ⇨ (excl) Yes / No

Q1.2. If 'yes', at what level, as % of time of all course modules taught?

- ⇨ (excl) 5% / 10% / 15% / 20% / 25% / 30% / 35% / 40% / 45% / 50%

Q1.3. What kind of practical training would you consider essential/a priority for this target group, as part of the full 1 year course? (several answers possible)

- ⇨ none
- ⇨ basic electrochemical experiments
- ⇨ impedance spectroscopy
- ⇨ assembly of cells / stacks
- ⇨ safety
- ⇨ characterisation techniques / which: please specify
- ⇨ other: please specify

Q1.4. Comment box to target group 1

Target group 2: **Technical engineers (3-year graduates, higher education) – TeacHy delivery: full course or course modules**

Another important target group for the FCHT workforce: bachelor graduates from technical engineering schools and universities of applied sciences, delivering a bachelor degree after 3 years of education, to enter industrial companies as young professionals.

This group of people accesses course modules from the TeacHy education/training material to obtain certificates, while remaining essentially fully employed. Additionally, TeacHy could later build a specialisation course in FCHT targeted to this group, leading to a 'FCHT engineer' degree, which would likely be different from the master course delivered to target group 1.

Q2.1. What training should be offered to this target group of people?

- ⇨ (excl) Preferably individual course modules delivering certificates / Preferably a dedicated course delivering a degree / Both are equally possible and important

Q2.2. Do you agree that the content of a specialisation course targeting this group is different than the course targeting group 1 above?

- ⇨ (excl) Yes, it must be different / No, it could be similar (differing in a few modules only)

Q2.3. What would be the appropriate specialisation course length for this group?

- ⇨ (excl) ½ year / 1 year / Other: please specify

Q2.4. This course could be differentiated towards different FCHT applications (see Q2.5 for examples). E.g. 50% common modules (e.g. the 1st semester) and 50% specialised modules (e.g. the 2nd semester). Would you agree?

- ⇨ (excl) Yes, it could be differentiated towards different FCHT applications / No, it should preferably to 100% be a general course covering all applications

Q2.5. If you ticked 'Yes' to Q2.4, which of the following would you agree to differentiate? (several answers possible)

- ⇨ Transport application (automotive, power electronics industry,..) / Stationary application (energy providers, appliances companies,..) / H_2 production (electrolysis, filling stations, safety,..) / Other: please specify

Q2.6. Should practical course modules be offered to this target group, i.e. in a teaching laboratory?

- ⇨ (excl) Yes / No

Q2.7. What kind of practical training would you consider essential/a priority for this target group? (several answers possible)

- ⇨ none
- ⇨ basic electrochemical experiments
- ⇨ impedance spectroscopy
- ⇨ assembly of cells / stacks
- ⇨ safety
- ⇨ characterisation techniques / which : please specify
- ⇨ high-tech university equipment / which : please specify
- ⇨ modelling tools / which : please specify
- ⇨ other: please specify

Q2.8. Comment box to target group 2

Target group 3: **Technicians (vocationally trained graduates, industry professionals, usually 3 years) – TeacHy delivery: full course or course modules**

Another target group for the FCHT workforce: graduates from technical schools, from completed apprenticeship training and vocational training schools, trained industry professionals (example: the process/energy/automotive industry, transport and distribution, fire and rescue brigades, insurance, teaching institutions, legislative bodies,…).

This group of people accesses course modules from the TeacHy education and training material to obtain certificates, while remaining essentially fully employed. Additionally, TeacHy could later build a dedicated course in FCHT specifically targeted to this group, leading to a 'FCHT engineer' degree. This course might be similar to that of target group 2 above.

Q3.1. What training should be offered to this group of people?

- ⇨ (excl) Preferably individual course modules delivering certificates / Preferably a dedicated course delivering a degree / Both are equally possible and important

Q3.2. Do you think that the content of a specialisation course targeting this group is similar to the course targeting group 2 above?

- ⇨ (excl) Yes, a similar course could be delivered to both target groups 2 and 3 (differing in a few modules only) / No, the courses for target groups 2 and 3 would be substantially different so as to create and deliver 2 distinct courses, one per target group

Q3.3. What would be the appropriate specialisation course length for this group?

- ⇨ (excl) ½ year / 1 year / Other: please specify

Q3.4. This course could be differentiated towards the different FCH applications (see Q3.5 for examples). Would you agree?

- ⇨ (excl) Yes, it could be differentiated towards different FCHT applications / No, it should preferably to 100% be a general course covering all applications

Q3.5. If you ticked 'Yes' to Q3.4, which of the following would you agree to differentiate? (several answers possible)

- ⇨ Transport application (automotive, power electronics industry,..) / Stationary application (energy providers, appliances companies,..) / H_2 production (electrolysis, filling stations, safety,..) / Other: please specify

Q3.6. Should practical course modules be offered to this target group, i.e. in a teaching laboratory?

- ⇨ (excl) Yes / No

Q3.7. What kind of practical training would you consider essential/a priority for this target group? (several answers possible)

- ⇨ basic electrochemical experiments
- ⇨ impedance spectroscopy
- ⇨ assembly of cells / stacks
- ⇨ safety
- ⇨ characterisation techniques / which : please specify
- ⇨ high-tech university equipment / which : please specify
- ⇨ modelling tools / which : please specify
- ⇨ other: please specify

Q3.8. Comment box to target group 3

Target group 4: **Employees and professionals from industry and other businesses – TeacHy delivery: initial training or continued training**

People already employed in different industries (incl. trained specialists) and businesses (incl. managers, economists, finance industry, etc.), and requiring access to either introductory or else specialised FCHT training material, typically in the form of modules or short courses.

Q4.1. As initial training to this target group (e.g. a Tutorial, or a Summer/Winter School), TeacHy could deliver the following:

- ⇨ (excl) An introductory course of 0 / 1 / 2 / 3 / 4 days / 1 week / 2 weeks ("0 days" meaning that no specific Introductory course need to be designed for this group, e.g. because Introductory material could be accessed through the electronic platform)

Q4.2. Comment box to Q4.1.

Q4.3. What priority would you consider that building an introductory course has for this target group, within TeacHy?

- ⇨ (excl) 1. Very important / 2. Important / 3. Not important / 4. Not at all important

Q4.4. As continued training to this target group, specialised modules could be offered. Some modules could also be practically oriented. What priority would you consider that offering practical training modules has for this target group, within TeacHy?

- ⇨ (excl) 1. Very important / 2. Important / 3. Not important / 4. Not at all important

Q4.5. Such practically oriented modules could be (several answers possible):

- ⇨ safety
- ⇨ characterisation techniques / which : please specify
- ⇨ high-tech university equipment / which : please specify
- ⇨ modelling tools / which : please specify
- ⇨ other: please specify

Q4.6. Comment box to target group 4

Target group 5: **PhD Students – TeacHy delivery: continued training**

Depending on their field of expertise/discipline, their experience or need, PhD students could receive education from FCHT Introductory short courses (typically Summer/Winter Schools for 2-4 ECTS credits, usually 1st year PhD students starting in the FCHT field), to specialized expert short courses on selected topics (for 2nd/3rd year PhD students).

Q5.1. TeacHy should endorse and approve existing summer/winter schools delivered on FCHT topics.

- ⇨ (excl) Yes / No

Q5.2. TeacHy should develop its own (new) summer/winter school.

- ⇨ (excl.) Yes / No

Q5.3. What priority would you consider that delivering summer/winter schools has for this target group, within the TeacHy project?

⇨ (excl) 1. Very important / 2. Important / 3. Not important / 4. Not at all important

Q5.4. Comment box to Q5.1 until Q5.3

Q5.5. Specialized short courses on specific topics for PhD students should be developed, during or after TeacHy.

⇨ (excl.) Yes / No

Q5.6. If you answered 'Yes' to Q5.5, on what topics? (several answers possible)

⇨ modeling packages / electrochemistry / impedance spectroscopy / characterisation techniques (which: specify) / other: please specify

Q5.7. What priority would you consider that developing specialised short courses has for this target group, within the TeacHy project?

⇨ (excl) 1. Very important / 2. Important / 3. Not important / 4. Not at all important

Q5.8. Comment box to Q5.5 until Q5.7.

Q5.9. Comment box to this target group 5

Target group 6: **Bachelor Students – TeacHy delivery: initial or continued training**

1st, 2nd or 3rd year bachelor students in science and engineering disciplines of either university or technical higher education (BSc, B.Eng.), i.e. people in the younger education years who will later become the target groups 1 and 2, once graduated. This group of people accesses TeacHy training modules to complement their education.

Q6.1. What modules / topics do you consider relevant that TeacHy could offer to this target group?

⇨ Thermodynamics / Electrochemistry / H_2 basics and technology (economy, production, storage,..) / FCHT introduction and applications / Other: please specify

Q6.2. What priority would you consider that offering modules for this target group has, within the TeacHy project?

⇨ (excl) 1. Very important / 2. Important / 3. Not important / 4. Not at all important

Q6.3. What priority would you consider that TeacHy should attribute to offering modules for this target group to Universities in general, i.e. proposing that certain TeacHy modules become a reference source in the Bachelor curriculum across Universities?

⇨ (excl) 1. Very important / 2. Important / 3. Not important / 4. Not at all important

Q6.4. For which modules? (see e.g. Q6.1)

⇨ empty box to specify the modules

Q6.5. Comment box to this target group 6

Target group 7: **Stakeholders – TeacHy delivery form: to be determined**

'Stakeholders' can be any group of people. A 'stakeholder' is characterised by 2 properties: his/her interest or concern in a topic or field, and his/her influence or power in this topic or field. Car manufacturers may have great interest in FCHT, but their influence/power remain limited. A government has a lot of influence/power, but its interest in FCHT may be limited. Etc. Universities, Research Centers, students, graduates and technicians are stakeholder groups that have been addressed in target groups above. The general public is another stakeholder group that is addressed as target group 8.

Q7.1. What other 'stakeholders' should TeacHy consider in general? (see difference to Q7.2)

- ⇨ Governments / Politicians / Local communities / Investors / Funding agencies / Lobbyists / FCHT manufacturers / FCHT OEM suppliers / Owners of FCHT units, installations / Customers / Large industry groups / Manufacturing SMEs / Service SMEs / Trade Unions / Press, media / Other : please specify

Q7.2. What 'stakeholders' should TeacHy address within the TeacHy project? (see Q7.1)

- ⇨ Governments / Politicians / Local communities / Investors / Funding agencies / Lobbyists / FCHT manufacturers / FCHT OEM suppliers / Owners of FCHT units, installations / Customers / Large industry groups / Manufacturing SMEs / Service SMEs / Trade Unions / Press, media / Other : please specify

Q7.3. What form could the teaching and educational material be for various stakeholders?

- ⇨ Courses leading to a degree / Modules leading to a certificate / Factsheets (e.g. impact and importance of FCHT,..) / Flyers, Brochures (e.g. working principles of FCHT,..) / Newsletters / Illustration or Demonstration videos (e.g. experiments, safety, installations,…) / Links to websites / Other: please specify

Q7.4. For the 'stakeholders' groups you ticked in Q7.2, please select those you consider to be up to the 5 most important ones and rank them by priority. (If you consider there are less than 5, list only those.)

- ⇨ Most important stakeholder group 1 / 2nd most important stakeholder group 2 / 3rd most important stakeholder group 3 / 4th most important stakeholder group 4 / 5th most important stakeholder group 5

Q7.5. For each of these 5 (or less) important stakeholder groups, indicate which form of teaching material (see examples in Q7.3) you consider to be most appropriate?

- ⇨ Stakeholder group 1 : teaching material = …….. (box)
- ⇨ Stakeholder group 2 : teaching material = …….. (box)
- ⇨ Stakeholder group 3 : teaching material = …….. (box)
- ⇨ Stakeholder group 4 : teaching material = …….. (box)
- ⇨ Stakeholder group 5 : teaching material = …….. (box)

Q7.6. What general priority would you consider that offering teaching & educational material for various 'stakeholder groups' has, within the TeacHy project?

- ⇨ (excl) 1. Very important / 2. Important / 3. Not important / 4. Not at all important

Q7.7. Comment box to target group 7

Target group 8: **General public – TeacHy delivery form: to be determined**

The general public is defined as a target audience in TeacHy, and might be considered to be any interested citizen, in principle with layman's knowledge, in search for information on FCHT.

Q8.1. What priority would you consider that offering educational material to this target group has, within TeacHy?

- ⇨ (excl) 1. Very important / 2. Important / 3. Not important / 4. Not at all important

Q8.2. Which form of educational material do you consider to be the most appropriate for this target group, that TeacHy should offer or deliver? Please select only a maximum of 3 among the list.

- ⇨ Factsheets / Flyers, Brochures / Newsletters / Illustration or Demonstration videos / Links / Other: please specify

Q8.3. Comment box on target group 8

5 Target Groups feedback

Feedback from the consortium on the questionnaire, which was presented and discussed at meetings is summarised below for the various TG.

Target group 1: Masters in engineering or science (5-year university graduates) – TeacHy delivery: full course

The course will be M.Sc or M.Eng taught in universities. (Suitable for graduates with a bachelor degree from technical engineering schools). It should contain 25% practical lessons. The host university would provide 25% of local teaching and 75% on-line from the TeacHy webtool platform. The practical work can be in the form of a local labwork run by the host university or an elective labwork taken in an approved institution or industry.

The practical work should cover i-V, EIS, cyclic voltammetry etc, hydrogen safety, performance aspects such as electrode activity, fuel cross-over, catalyst properties, membrane materials, hydration, solid oxide basics etc.

Target group 2: Technical engineers (3-year graduates, higher education) – TeacHy delivery: full course or course modules

This TG can pick out any modules from the TeacHy education/training material; universities can integrate TeacHy material locally to make up a full Engineering B.Sc course.

These are engineers that are studying at the bachelor level in universities. They may be part time students, so this group needs flexibility to complete the course, however it is expected that mostly the course will be completed within 1 year (2-semester course). It is not considered desirable to offer a course of less than 1 year because this will not be sufficient to gain experience relevant to the industry sector.

Given the technical emphasis, this course should be split 50% in common core modules (semester 1) and 50% specialised modules (semester 2) which can be selected from the TeacHy modules. It is essential to offer practical training, with applications as a priority. This training should include the following: use of standard cell test stations; analytical techniques including microscopy, SEM, EDX, XRD; process modelling (mass/energy balances); specific practical modules for technicians, for example taken from the *TrainHy,* Safety programme.

Target group 3: Technicians (vocationally trained graduates, industry professionals, 3 years) – TeacHy delivery: full course or course modules

Similar to that of target group 2 above. The feedback is that this TG is best addressed with a short course of up to 1 semester with a greater emphasis on practical course modules that should concentrate on the basics as well as power analysis and thermal management. This type of training would be similar to the offerings of the KnowHy project.

Target group 4: Employees and professionals from industry and other businesses – TeacHy delivery: initial training or continued training

The consortium feels that this TG will benefit from very short courses, from 1 day to 2 weeks. This is to allow time to fit into normal working commitments. The courses in this TG should prioritise e.g. 1-day overview of fuel cells and hydrogen technologies; practical training in safety; practical training characterisation and operation.

Target group 5: PhD Students – TeacHy delivery: continued training

The feedback consensus is that TeacHy should endorse existing workshops and seasonal schools with the TeachHy label. TeacHY could principally develop its own W/S school, but the consensus prefers to focus on supplying its own course material to existing schools, such as that run by the JESS and then endorse these schools with the TeachHy label. Specialist short courses not yet part of the existing W/S school circuit could be developed, e.g.: Electrochemistry and EIS methods; Reversible cells; MEA methods; Analytical methods including SEM-EDX, XRD, CV; Politics, LCA/recycling, market & business development; System engineering & management. These topics could also be added to existing W/S schools. TeacHy furthermore proposes to in future organise alumni gatherings to enable continued networking after completion of the student thesis.

Target group 6: Bachelor Students – TeacHy delivery: initial or continued training

This group will benefit from basics that cover most of the topics but excluding the more advanced modules. This is possible if universities use the TeacHy modules as a reference source in defining curricula. Example modules would be: electrochemistry, thermodynamics and fuel cell basics.

Target group 7: Stakeholders– TeacHy delivery: general information and dissemination

Universities, Research Centres, students and technicians are stakeholder groups that have been addressed in target Groups 1 to 6 above. The general public is another stakeholder group that is addressed as target Group 8.

This TG7 is broad and diverse; most will be interested in general modules that paint a broad-brush overview of topics, similar to the basic models that target group 6 would be interested in. However, the modules should be educational as well as informative.

The ranking of stakeholders could be along the following lines: (a) Governments, Politicians, Lobbyists; (b) Investors, Large industry groups, FCHT manufacturers; (c) Funding agencies; (d) Customers, service SMEs, manufacturing SMEs.

Target group 8: General public – TeacHy delivery: general info and dissemination

The main challenge is to publicise the purpose of TeacHy and its objectives and to provide basic and solid information in a meaningful and interesting way. Social media tools could be used to widen the audience and more in-depth information could be made available by the use of MOOCS, books, magazine articles, promotional videos etc. Also, more direct interaction by public engagement events, conferences, school outreach sessions etc. in the forms of general dissemination.