



# FEMtech Programme Evaluation

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*Executive Summary | FEMtech Programme Evaluation*

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## The FEMtech Programme

FEMtech is a programme of the Austrian Federal Ministry for Transport, Innovation and Technology (Bundesministerium für Verkehr, Innovation und Technologie – BMVIT) initiated in 2004 to promote women and secure equal opportunities in research and technology. The programme is implemented within the framework of fFORTE (Women in Research and Technology), a cross-ministerial umbrella initiative launched in 2002 upon recommendation of the Council for Research and Technological Development. FEMtech aims at improving the general conditions and career opportunities for already employed women and (potential) entrants in companies and organisations of industrial and non-university research. The intention is to boost the attractiveness of technical and science related professions for women in order to increase the total number of employed women. The FEMtech Competence Centre in cooperation with the Austrian Research Promotion Agency (FFG) has been in charge of the programme's implementation since mid-2008 until the end of 2010. The Competence Centre is represented by the Austrian Association for Environment and Technology (ÖGUT), Joanneum Research Forschungsgesellschaft, Bohmann Druck und Verlag as well as D&Z Consulting.

## The evaluation

The BMVIT has commissioned “ARGE 3C“ consisting of the research and consultancy institute convelop (Graz, Vienna) as well as the German partner institutes com.X (Bochum) and CEWS, a department of the Leibniz Institute GESIS (Bonn), to conduct the FEMtech programme evaluation for the period from August 2010 to the beginning of February 2011.

The aim of the evaluation was to assess the medium-term effects and the directions of impact (based on a term of about 7 years) as a contribution to the further development of the programme. To this end, a pragmatic and focussed evaluation design was used that combines quantitative and qualitative methods. The following were used in addition to a comprehensive document analysis: Differenzierte Onlinebefragungen (389 FEMtech NutzerInnen und 1.583 FFG-Fördernehmende)

- Differentiated online surveys (389 FEMtech users and 1,583 FFG funding receivers)
- Focus interviews (management level of RTI companies, FEMtech funding receivers, RTI political actors, former female programme managers)
- Product analyses (FEMtech output and international case studies)
- Media resonance and usage analysis (FEMtech website)
- Programme discussions and self-assessment (FEMtech implementors)

## Key evaluation results

The field of “Funding“ forms the basis of FEMtech; it comprises the three programme lines Career, Career Paths and RTI Projects. Promoted are actions for the enhancement of equal opportunities within companies and non-university research institutions (Career), cooperations between colleges and companies for the preparation of female students for their career in industrial research (Career Paths) as well as research projects with gender dimension (RTI Projects).

In addition, FEMtech comprises a set of many different measures for awareness raising and sensitisation, networking and imparting of knowledge that in this form and to this extent is unique in Austrian research promotion. These measures fall into two categories: “Activities“ includes all measures for awareness raising, sensitisation and networking as well for the visibility of women in Research and Technology (website, newsletter, event formats, prizes and awards as well as database research services). “Knowledge“ provides data and information, presents studies and publications as well as abstracts on national and international research topics in the areas of “Equal Opportunities“ and “Women in RTI“.

For a detailed description of the individual measures in the overall portfolio as well as of the assessments of the degree to which the goals were achieved, please refer to chapter 3 “FEMtech Portfolio Analysis“, as well as in particular to chapter 4 “FEMtech Effects and Impacts“ in the final evaluation report.

## FEMtech Funding

Good effects have been achieved by the line of funding ”Career“ regarding soft factors of awareness raising towards equal opportunities. Structural and organisational changes above all include measures to improve the work-life balance (mainly flexible working time), gender-sensitised recruitment and human resources development and, to a minor extent, measures to explicitly promote women. This is scarcely reflected in concrete figures (improved presence of women in new recruitments and decision-making positions). “Career“ clearly shows that the funding leads to a build-up of momentum in the company. Already planned measures are faster, more comprehensively and systematically implemented. So first and foremost companies, in which a basic understanding of the topic already existed, could be reached for the implementation of specific measures.

In the supported cooperations, the goal to create a wider offer for the preparation of female students for a career in industrial research has been achieved by “Career Paths“ on a “medium“ level. Thus, this line of funding contributes to an enhancement of the offer and systematisation of the cooperation between companies and colleges in matters of securing young female recruits. Also here, the actual reflection in form of a higher number of female entrants in the industry is moderate, however, difficult to achieve per se and depending on many intervening factors (e.g. self-interest of colleges regarding talented young recruits). Furthermore, the achieved output (here: specific number of female students reached with the measure) is very low in view of the used resources – and “moderate“ with, at the same time, an unknown outcome regarding the actual

career paths; in the long turn, however, this output can only be achieved with a combination of measures, for example with systematic changes in personnel recruiting and structural changes in the company, to which the experiences made possible in the context of “Career Paths“ can only provide stimuli.

“RTI Projects“ achieve a “medium” level impact on all the different levels of awareness raising regarding the gender dimension in research projects; this is the only line of funding to have a submission rate markedly exceeding the actually approved projects. The achieved changes are on a lower level than with the other two lines of funding. Problematic is the sometimes critical external perception, particularly of RTI political actors. In addition, the target group Companies seems to have a low awareness of “gender in research projects” as yet: its participation is lower than with the other two lines of funding; 55% of the projects were submitted by universities.

## FEMtech Activities

With the formats bundled under the heading “**Activities**“ for sensitisation, awareness raising and promotion of networking in combination with press and public relations, FEMtech highly contributes to the strengthening of the public debate on “equal opportunities” and “women in RTI”. To a limited extent, the goal of networking has been achieved – here, the impact is restricted to a community with an already high affinity to the topic. Similar as with “Funding“, it must be said that companies are reached to a lower extent on a broad basis.

The website and online newsletter are the paramount instruments for a good introduction to the programme with a low threshold and, at the same time, an important backbone for a closer linking of the community. Also the network meetings organised since the programme start are well known in the entire RTI community and reach a wide range of participants comprising 1,200 people with a high affinity to the topic; there is, however, a marked concentration on Vienna. Despite a de facto high percentage of new participants on the individual dates, in the external perception of companies and political actors in the RTI field the meetings are still a venue for a narrow community.

The forum NaWi)(tech on the other hand that is designed as job, dissertation and traineeship fair is not well known, which is reflected in the low participation of female students and graduates. Accordingly low is the satisfaction on the part of the participating companies that expect a stronger resonance to their presentation as potential employer.

A high media resonance is achieved by the “Female expert of the month” that effectively promotes the presence of successful RTI women. There are, however, little benefits from this to the underlying “Database of female experts” – it is mostly used by the female experts themselves or a closer community from colleges and research institutions.

## FEMtech Knowledge

With “**Knowledge**“, FEMtech has created an excellent central collection point for data and facts, studies and publications from the area of women in research and technology. Most FEMtech internal and external publications are available for download. Problematic, however, is that regarding the data material that has been broken up into small sections a degree of saturation has by now been reached and the provided information is used only, yet very intensively, by a small circle with affinity to the topic. Furthermore, the companies’ target group is only marginally reached with “Knowledge”; the offers inadequately meet their requirements and are prepared with an insufficient focus on their target group.

## Programme implementation and integration of FEMtech

In its seven years of existence, FEMtech has already gone through three different phases of programme priorities and organisational structures; the fourth phase commences in 2011. These changes were characterised by conceptual redesigns as regards content with a correspondingly detrimental effect on continuity and coherence. The main reason why these changes were not profoundly experienced from the outside is the extensive continuity of the people and organisations implementing the programme.

Structural factors had an exacerbating effect: both the FEMtech-specific cooperation regarding organisation and content between the Federal Ministry for Transport, Innovation and Technology “BMVIT”, the Competence Centre and the Austrian Research Promotion Agency “FFG” as well as the division of thematic responsibility between three ministries within the scope of fFORTE increase the requirement of coordination.

FEMtech and the topic of equal opportunities and gender mainstreaming in general have been able to get attention, but gained little recognition in the RTI political community that rather orients itself on funding volumes and “classical” programme funding.

## Result and conclusions

FEMtech has exploited the windows of opportunities in order to take up and address the topics of equal opportunities and promotion of women in the RTI political area as well as to timely implement measures. The combination of awareness and promotional measures has worked to this end. Phase 1 of a mainstreaming process of equal opportunities (raise interest) was successfully implemented.

- Awareness has been achieved, the target groups have been sensitised to the topic. The level of awareness of FEMtech (44%) in the RTI community is high.
- Networking of the “interested parties” and those already “sensitised” is happening successfully, the circle continues to grow.

- RTI political actors confirm that the debate about equal opportunities in research promotion has changed (increased consideration with regard to the appointment of juries, boards etc.).
- FEMtech fundings have created showcases. In future, the most successful ones can be turned into motivating best practice examples after having been edited with a focus on the target groups.
- FEMtech users are generally satisfied, i.e. the programme lines Funding, Activities and Knowledge get good ratings.
- Impacts were most marked in the sensitisation area, less so in the organisational-structural area; there were hardly any changes regarding the shares of women.

But: so far mostly people and organisations with an affinity to the topic are using FEMtech. There is evidence of an excessively high concentration on Vienna as well as those federal states that actively promote research also by other means.

FEMtech has distinguished itself with its experimental nature. Different measures were tried, not all of which achieved the desired success as is shown by the results of the online survey (refer to Chapter 3 in the final evaluation report). Here, both the lack of awareness of the measures (FEMtech meets Fiction, Forum NaWi)(tech) as well as a lacking clarity regarding the objectives and value added of the respective measures could be identified as important factors. In this context, a reduction of the measures' heterogeneity as well as an improved communication for the purpose of an adaptation to the needs of the target groups is required in order to exploit the existing potentials.

With the experimental nature of FEMtech also the target groups changed: individual groups were added, changed and supported with different intensity in different phases. If in particular companies and research institutions are to be mobilised towards equal opportunities, their needs and "leverage mechanisms" must be addressed with more differentiation both in terms of communication and in terms of offers.

The following aspects are critical and impede the successful continuation of the programme:

- The brand FEMtech is well anchored, however, too strongly triggers the association with "promotion of women". It is much easier to reach companies and research institutions via "equal opportunities". Here, it is important to clearly position the successful brand in terms of content in order to have the effect of a "brake on communication" in the future.
- The two key target groups of research promotion are RTI companies and non-university research institutions. The latter are relatively well reached with FEMtech; the companies' requirements, however, are insufficiently met.
- FEMtech has not invested enough in the development of cooperation and network structures. If in future no male and female multipliers, RTI in-

stitutions etc. can be won as allies on federal and regional level, no substantial progress towards equal opportunities can be expected.

## Recommendations

In order to sharpen the possible trends of FEMtech, the evaluation team concludes with a prioritisation of its recommendation as follows:

### Intensification and consistency of gender equality policy approaches

- It is helpful to be able to make clear references to the selected equality policy approaches both when it comes to communication as well as to the planning and implementation of measures. While the promotion of women is based on the principle of positive discrimination, the promotion of equal opportunities should offer women and men comparable chances of success. Accordingly, measures of equal opportunities can relate to and integrate both groups (refer to chapter 2.4 “Equality policy approaches” in the final evaluation report.).
- The selected approach must be stringently presented to the outside to allow the target groups’ expectations to connect to it. This is particularly important in the communication with companies for which considerations of the economic benefits of an improved equality of opportunities play a central role.

### Concentration and focusing

- Equal opportunities bring about structural changes in companies and research institutions. All measures within the scope of FEMtech guarantee a structural anchoring of the results achieved within the scope of the promotion.
- The lines of funding Career and RTI Projects to be continued require more support, consultation and networking services in target group logic in order to achieve a transfer on a broad basis.
- In the line “Career Paths“, a redesign towards a stronger focusing is to be contemplated. The heterogeneity of the options (from short work placements during studies to dissertations and assistance when it comes to actually entering the profession) makes it particularly difficult to plan and implement accompanying measures.

### Regionalisation and cooperation

- For network meetings and the “promotion of measures“, different offers are needed not only for the already interested people, but also for cooperations and network structures, particularly with male and female multipliers and actors in the field of business and innovation development as well as with professional associations on federal and regional level.

The strength of FEMtech lies in the people working for it who are perceived as credible, committed and professional. The future success of the programme,

however, mainly depends on the political responsibility for equal opportunities in Austria's RTI politics. Its sincerity and persistence will be a decisive factor in determining whether equal opportunities for women and men in the Austrian innovation system will be a mere verbal ascription or a matter of course.

## Overview on outreach and effects of FEMtech

| Funding              |   |  |   |
|----------------------|---|--|---|
|                      | RTI Projects  | Career   | Career Paths  |
| <b>Utilisation</b>   | Approved: 13 projects<br>(28% of submissions)   | Approved: 64 projects<br>(83% of submissions)  | Approved: 6 projects<br>(86% of submissions)  |
|                      | Mainly companies and, to a lesser extent, research institutions   |  | Hardly any companies, mainly colleges)  |
| <b>Awareness</b>     | Low awareness with RTI companies (all lines of funding)   |  |   |
|                      | High awareness with research institutions (Career, RTI Projects) and colleges (Career Paths, RTI Projects)  |  |   |
| <b>Satisfaction</b>  | High satisfaction with assistance and funding process   |  |   |
|                      | Low satisfaction with application and reporting requirements (particularly companies that have little funding experience with the line of funding "Career"; frequent reason for non-submission) |  |   |
| <b>Outcome</b>       | Medium awareness raising effects on<br>- mixed gender research teams<br>- women as specific funding users   | Momentum:<br>faster and more systematic measure implementation<br>improved work-life balance<br>systematisation of human resources development and recruitment<br>moderate structural changes for the promotion of women<br>Hardly any effects on the share of women | Medium effects on<br>- creation of career preparation offers<br>- practical skills of female students<br>- share of female entrants in the industry |
|                      | To a lower extent on<br>- the "gender" dimension in research projects   |  |   |
|                      |   | <i>with supported institutions</i>   | <i>with cooperations universities-companies in total</i>  |
| <b>Other results</b> | Critical external perception (experimental stage)<br><br>Companies insufficiently sensitised to topic<br><br>Main submitters are universities   | Organisations not reached on a broad basis;<br><br>Organisations hard to motivate, mostly already sensitised parties are reached   | High effort with unknown impact on actual career paths  |

|                      | Activities  | Knowledge  |
|----------------------|---|--|
| <b>Utilisation</b>   | <p>Web/NL: strong utilisation by FEMtech addressees</p> <p>Network meetings: mainly visitors with an affinity to the topic</p> <p>Female experts DB: low overall utilisation in RTI</p> <p>Awards: slow resonance to announcements, some good media resonance</p> | <p>Targeted and comprehensive utilisation by FEMtech community</p> <p>Very low utilisation by RTI as a whole</p>   |
| <b>Awareness</b>     | <p>High awareness of all activities in FEMtech community</p> <p>Solid awareness of web/newsletter, awards and network meetings: in RTI as a whole</p> <p>High attention with Female expert of the month</p>   | <p>Good awareness in the narrow circle of the FEMtech community</p> <p>Very low awareness in RTI as a whole</p>  |
| <b>Satisfaction</b>  | <p>High satisfaction with all activities of RD and universities</p> <p>Consistently low satisfaction of RTI companies</p>   | <p>Very high satisfaction in the narrower FEMtech community</p> <p>Low satisfaction of RTI companies</p>   |
| <b>Outcome</b>       | <p>Good strengthening of public discussion about equal opportunities and promotion of public presence of successful women in RTI as a whole</p> <p>Good promotion of networking in the circle of users with high affinity to topics</p>                           | <p>Good contribution to the improvement of the data/information offer</p> <p>Use as company-internal argumentation aid</p> <p>Solid improvement of internal skills and knowledge<br/><i>in narrow circle of users</i></p>                        |
| <b>Other results</b> | <p>Sensitisation beyond circle of users: topic of equal opportunities boosted on a broad basis</p> <p>FEMtech promotes/benefits from changed importance of equal opportunities</p>  | <p>Data: oversupply, access to materials little structured and target group-specific</p> <p>Publications: too strong focus on own measures</p> <p>Effects limited to narrow circle of users<br/>Insufficiently meets companies' requirements</p> |



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