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Study

The role of women in energy

Female empowerment in Eastern Europe and Central Asia



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„The Role of Women in Energy – Female Empowerment in Eastern Europe and Central Asia“

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Preface



Dear reader,

Germany maintains energy partnerships and conducts energy dialogues with more than 20 countries worldwide. The Federal Ministry for Economic Affairs and Energy and its partners agree that a successful energy transition must be conceived globally. Climate change can only be effectively combated through a team effort.

We need the most talented individuals for the reconstruction of energy systems and to achieve international climate targets. We therefore need not only male but also female energy experts. However, up to now there has been a gender imbalance in this area: statistics on gender distribution in the energy industry clearly show that women do not enjoy the same career opportunities as their male counterparts and are underrepresented particularly in technically-oriented areas and management positions.

It is therefore important, including from the point of view of energy policy, to promote equal opportunities and

break with prejudice and gender stereotypes. Besides the statutory and social framework, role models also have an effect on gender equality. With the advancement of women within the framework of energy cooperation, the Federal Ministry for Economic Affairs and Energy wants to support female energy experts in their pursuit of a successful career in Germany and partner countries and thus also increase the visibility of female role models.

This study provides the first ever overview of the political, economic and social frameworks in selected partner countries in Eastern Europe and Central Asia that affect the participation of women in the energy sector. The study is the basis for intensification of the advancement of women within the framework of energy partnerships and energy dialogues of the federal government and further strengthening of the role of women in the energy transition and their participation in the energy policy dialogue.

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The role of women in energy

Women account for half of the world's population. Nevertheless, they are underrepresented in social life. The Global Gender Gap Report 2020¹ estimates the global gender gap for equal opportunities for women at 31.4 per cent compared to the status of men. There are big differences, for example, in economic and political participation, with a gap of 42 and 75 per cent as a worldwide average. By contrast, in other dimensions, such as health and education, a state of balance is just a few percentage points away. Nevertheless, the trend is clear: If the current rate of development were extrapolated, gender parity would only be achieved across all dimensions in around 100 years.²

Initial situation

Like the financial sector, the energy sector, as a predominantly technically oriented branch of industry, is particularly characterised by gender inequality. The IRENA study "Renewable Energy: A Gender Perspective"³ of 2019 confirms that energy is still male-dominated. It points out a low share of women particularly with regard to STEM professions (science, technology, engineering, and mathematics) and managerial positions. The renewable energy sector performs somewhat better compared to the conventional energy sector.

The reconstruction of energy systems with the aim of achieving carbon neutrality on the basis of energy efficiency and renewable energy also offers opportunities to overcome existing gender inequalities in the course of that transformation. Currently approximately 11 million people worldwide are employed in the renewable energy industry alone. Their number could increase to over 42 million by 2050.

The objective of the study

Women should take part in this expansion to the same extent as men. Their expertise and skills are essential to cover the increasing need for qualified personnel in the energy sector and related industries. With a higher share of women the diversity of expert teams increases and thus the opportunity to generate better, sustainable solutions. Higher participation by women is also necessary to succeed in bringing about profound social

change processes related to the energy transition and climate protection.

With this study the German Energy Agency (dena) addresses the strategic approach of the Federal Ministry for Economic Affairs and Energy (BMWi) to strengthening the role of women in the energy sector and promoting their participation in social and economic decision-making processes. The bilateral energy partnerships and energy dialogue offer a good framework for identifying female energy experts in Eastern Europe and Central Asia and connecting them within the regions both with each other and with relevant local players. Organised into (women's) networks, female energy experts, in their capacity as change agents, obtain higher visibility and can be integrated as civil society players into the bilateral energy policy dialogue and invited to engage in active cooperation.

At present little is known about the specific situation of women in the energy sector in Eastern Europe and Central Asia. The first studies for the Ukraine and Kazakhstan came out in 2019 and 2020 and contributed to the knowledge base on this subject. The following study provides an initial country-specific overview of the role of women in the energy sector, sketches the political and social framework conditions and identifies country and region-specific differences and commonalities. On that basis points of reference are derived for the specific requirement for multipliable support mechanisms and recommendations for action.

¹ The Global Gender Gap Report is a scientific report published each year by the World Economic Forum. The gender gap is currently examined in 153 countries around the world. The Gender Gap Index is calculated from 14 social indicators, which can be summarised in four subindices. In the report for 2020 the global Gender Gap Index amounts to 0.686. That means that the gender gap between men and woman has so far reached 68.6 per cent. http://www3.weforum.org/docs/WEF_GGGR_2020.pdf

² The Global Gender Gap Report calculated that, assuming a progressive rate of development, political gender equality should be expected in 95 years and economic equality of women and men only in 257 years. See: <https://www.weforum.org/reports/gender-gap-2020-report-100-years-pay-equality>

³ Renewable Energy: A Gender Perspective, IRENA 2019: <https://www.irena.org/publications/2019/Jan/Renewable-Energy-A-Gender-Perspective>

The issue to be examined

How can female energy experts and their contribution to the imminent social transformation in the course of the energy transition be strengthened? In this study for the target countries Ukraine, Kazakhstan, Russia, Uzbekistan, Turkey and Iran, current political and social framework conditions are examined that affect women's career opportunities. The extent to which women have access to the energy sector and the challenges and barriers with which they are confronted in that professional environment are particularly important. Further issues to be examined are: How are women supported and what public and non-public possibilities for supporting them exist? Where is there a need for support and how can it be covered?

Analysis and deduction method

For this study various research methods were applied. It is founded on comprehensive Internet research on the target countries and an evaluation of secondary literature both in English and the respective national language. Primary data was collected by way of an online survey among more than 100 female respondents from the target countries' energy industries. In order to create a broad information basis, partners were included, for example chambers of foreign commerce or local women's networks. Relevant female energy experts in the

respective target countries who are not yet organised into women's networks were also directly contacted.

Qualitative individual interviews were conducted with a series of female energy experts from the areas of politics, industry, science and civil society. The selected experts are established in their profession, are predominantly middle echelon professionals or middle management and have already held several positions. Their resources of experience include an overview of career paths and the challenges for women in the energy industry of the countries in question.

For the study, statistical data relating to the labour market was also evaluated in order to determine the significance of the energy sector for the respective economy and the gender distribution of the employees in the energy sector. For the general assessment of gender equality in the respective countries the global gender equality index of the World Economic Forum was used.

Internet research proved difficult sometimes with regard to access to information and data. The results of the research are therefore by no means meant to be complete and only represent a snapshot.

The results of these analyses and the information thus obtained are the basis for determining the need for support and deriving recommendations for action.

Country profile – Ukraine

With a gender gap of almost 28 per cent, Ukraine is in 59th place in the worldwide ranking, the best value among the countries investigated.⁴ Ukraine is still around 26 per cent short of economic equality for women. It has even further to go to achieve political equality for women. Here, a gender gap of almost 83 per cent must be overcome. Thus the values for Ukraine are average for the Eastern Europe and Central Asia region.⁵ While Ukraine does much better in the economic dimension than the worldwide average for the gender gap of 42 per cent, in the political dimension the country is below the worldwide average of 75 per cent.

Labour market

The employment rate in Ukraine stood at almost 67 per cent in 2019.⁶ Almost 61 per cent of women⁷ and 73 per cent of men fit for work⁸ were in gainful employment. The energy sector traditionally plays a key role for Ukraine's economy. According to the Ukrainian non-governmental organisation Poruch, the direct contribution of the energy sector to national GDP amounted to more than 9 per cent in 2018. In total 7.6 per cent of employees work in the energy sector.⁹ According to the National Statistics Service, the share of employment of women in the country's energy sector, despite a slightly positive trend, is still very low, ranging from 23 to 27 per cent between 2013 and 2017.¹⁰ A study conducted by the foundation Heinrich-Böll-Stiftung¹¹ confirms these figures. On average, the share of female employees in the energy sector in 2017 stood at 27 per cent, even though women

account for more than half of the country's total workforce at 54 per cent¹².

Women are not only underrepresented in Ukraine's energy sector. They also earn less than their male colleagues. In the energy subsectors of the mining and stone quarry industry, women earn on average around 63 per cent of the salary of their male colleagues. In bituminous and brown coal mining women earn barely 48 per cent of the average earnings of men. Thus the gender wage gap in the mining industry is the largest in the country.¹³ Across all sectors of industry, women in Ukraine earn an average of 70 per cent of men's salary.¹⁴

The German Energy Agency (dena) surveyed, in the period September to November 2020, over 100 female energy experts from a total of six East European and Central Asian countries on the role of women in the energy sector. 80 per cent of the participants confirm that

⁴ Country score card Ukraine, Global Gender Gap Report 2020, World Economic Forum, p. 347

⁵ The gender gap amounts on average for the Eastern Europe and Central Asia region to 27 per cent in the economic dimension and 85 per cent in the political dimension. Figure 8, Regional Performance 2020, Global Gender Gap Report 2020, p. 22

⁶ The World Bank defines the employment rate here as the share of the population aged 15 to 64 which is economically active, i.e. all the people who in a particular period provide working capacity for the production of goods and services. Unemployed people searching for employment are included. <https://data.worldbank.org/indicator/SL.TLF.ACTI.ZS?locations=UA>

⁷ <https://data.worldbank.org/indicator/SL.TLF.ACTI.FE.ZS?locations=UA>

⁸ <https://data.worldbank.org/indicator/SL.TLF.ACTI.MA.ZS?locations=UA>

⁹ http://poruch.com.ua/poruch_energy_gender/

¹⁰ Work in Ukraine in 2017: a statistical collection. State Statistics Service of Ukraine. Kiev, 2018

¹¹ The study "Women and Men in the Ukrainian Energy Sector" was implemented in the period 2018 to 2019 by the "Institute for Economics and Forecasting of the National Academy of Sciences of Ukraine", with the aim of finding ways out of gender inequality in the Ukrainian energy sector. The study was supported by Heinrich-Böll-Stiftung in Kiev, the women's network "Women's Energy Club Ukraine" and the Government Commissioner for Gender Politics. See: <https://ua.boell.org/en/2019/07/22/women-and-men-ukrainian-energy-sector-equal-rights-and-opportunities-or-sector>

¹² The results of the Böll study are based on data of the State Statistics Service of Ukraine. See infographics: Women and Men in the Energy Sector of Ukraine, Heinrich-Böll-Stiftung Kiev, p. 3:

https://ua.boell.org/sites/default/files/infographic_women_and_men_in_ukrainian_energy_eng.pdf. On the basis of data of the International Labour Organisation ILO, the World Bank calculated a lower share of women in the total workforce of Ukraine in the amount of 47 per cent. See: <https://data.worldbank.org/indicator/SL.TLF.TOTL.FE.ZS?locations=UA-KZ-RU-UZ-IR-TR>

On the basis of calculations, the World Bank estimated the share of women in the total population of Ukraine at almost 54 per cent in 2019. See: <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS?locations=UA-KZ-RU-UZ-IR-TR>

¹³ https://ua.boell.org/sites/default/files/genger_in_energy_report_2019.pdf, p. 41

¹⁴ Country score card Ukraine, Global Gender Gap Report 2020, World Economic Forum, p. 347

women in the energy sector on the whole and in leadership positions are underrepresented or predominantly underrepresented. Over 90 per cent consider that women in the energy sector are confronted with barriers if they hope to pursue a career in that sector or wish to develop professionally.¹⁵

As the most relevant reasons for the inequality of women in Ukraine's energy sector the Ukrainian participants in the dena survey most frequently gave gender prejudice and discrimination against women as well as an antiquated work culture and outdated corporate structures. Also frequently stated were a lack of self-confidence and a lack of networks that support women.¹⁶ The Böll study returns similar results on the basis of a survey of over 400 female and male employees in the Ukrainian energy sector. It found that the barriers include traditional role assignments for genders, as well as related cultural and social standards that influence the choice of profession. Non-family-friendly working conditions and an insufficient number of female role models are also given as key barriers explaining why more women are not represented in the energy sector.¹⁷

The largest company in the country DTEK¹⁸ (translation: Donbass Fuel Energy Company) analysed gender distribution in the country's conventional and renewable energy sector in 2016 and published a study¹⁹ on that subject. 32,000 women took part in the related survey. At that time 78 per cent of workers in the renewable energy industry 2016 were male and 22 per cent female.²⁰ Of that number more than half were female technical experts / specialists in assistant positions, 23 per cent technical personnel (for example tradespeople) and 17 per cent management personnel. The results also show that most of the female employees (83 per cent) did not specifically choose employment in the energy sector.

For comparison: In the years 2014 to 2019 Ukraine's solar and wind energy industry employed almost 25,000 people.²¹ The Ukrainian Association of Energy Service

Companies sees great potential for employment in the area of thermal modernisation of residential buildings and estimates the figure at almost 795,000 employees.

An internal company survey conducted by DTEK on gender distribution among its own employees showed that the female share of the workforce stood at a total of 30 per cent. An above average number of women therefore work at DTEK. The number of female management personnel has increased at DTEK in the last two years, which means there is a positive trend with regard to the role of female personnel at that energy company.²²

A look at the Ukrainian economy as whole shows: In total there are more women in management positions than in the energy industry. According to the Ukrainian Centre for Social Data, the share of female management personnel among all active business entities (public and private companies) stood at 40 per cent in 2017.²³ That rate is predominantly attributable to female sole proprietors. Up to mid-2017 sole proprietors accounted for 63 per cent of all business entities. With a share of women of 46 per cent, the gender distribution here was almost equal. At the same time the share of female managers in companies and organisations is much lower, at 30 per cent. This indicates that women in Ukraine conduct their own business on almost equal terms with men, but less frequently hold management positions in companies and organisations. This also applies for management roles in the government, as well as in local authorities.²⁴

Women in Ukraine tend to be better educated than men. The enrolment rate for female students in the area of tertiary education (e.g. universities, polytechnics, vocational academies) stands at almost 89 per cent compared to male students, who account for 76.8 per cent.²⁵ According to the National Ukrainian Statistical Service, the share of female university graduates amounted to 52 per cent. However, there are striking

¹⁵ See appendix

¹⁶ See *ibid.*

¹⁷ See infographics: Women and Men in the Energy Sector of Ukraine, Heinrich-Böll-Stiftung Kiev, p. 2: https://ua.boell.org/sites/default/files/infographic_women_and_men_in_ukrainian_energy_eng.pdf

¹⁸ DTEK is a Ukrainian energy enterprise which traditionally produces coal and natural gas and supplies households with electricity. Since 2011 DTEK has also produced electricity from renewable energy sources and driven innovations forward – it is represented in international organisations. For example, it was the first Ukrainian company to join Hydrogen Europe. <https://dtek.com/en/about/>

¹⁹ https://euea-energyagency.org/wp-content/uploads/2017/01/7Eday_report_ukr.pdf

²⁰ The figures were presented by Victoria Syromyatova in 2016 as part of "European-Ukrainian Energy Day". At that time she was

director of Wind Power LLC and is currently director of DTEK Renewables.

²¹ <http://reform.energy/media/1463/b46d83bca4c4d68ed98f1807262d702c.pdf>

²² https://euea-energyagency.org/wp-content/uploads/2017/01/7Eday_report_ukr.pdf

²³ Women and Men in Leadership Positions, Ukrainian Center for Social Data in collaboration with the United Nations Development Program and the Swiss Confederation: https://euea-energyagency.org/wp-content/uploads/2017/01/7Eday_report_ukr.pdf

²⁴ *Ibid.*

²⁵ Country score card Ukraine, Global Gender Gap 2020, World Economic Forum, p. 347

differences when it comes to the choice of study courses: Of a total of 474 students, only 30 women graduated from courses in energy and energy technology in 2019.²⁶ The World Economic Forum calculated for 2019 that the share of women with university degrees in STEM subjects in Ukraine is three times lower than the figure for men. Thus only 13.7 per cent of the women attained an educational qualification in those subjects compared to 38.4 per cent of the men. Less than 10 per cent of female students obtained a university degree in engineering and construction and manufacturing.²⁷

The Böll study also confirms that women in the energy sector are often better qualified in their positions than men.²⁸ Overall it concludes that the energy transition is helping to lower barriers for women in the energy sector and increase the potential for women to pursue careers. Thus the scientists involved in the Böll study identified a negative correlation between new energy sectors, for example renewable energy sources, and gender inequality.

Political framework conditions

The domestic legal framework for gender equality in Ukraine is being gradually harmonised with international standards. In 2005 the “Act Guaranteeing Equal Rights for Women and Men” was adopted.²⁹ It is deemed the practical implementation of the principles of gender equality which are anchored in the constitution. With the introduction of a government commissioner for gender policy in 2017, the principles were transferred into the executive bodies. The task of the government commissioner is to oversee the adoption of regulations by the Cabinet of Ministers and thus ensure the integration of the principles of equality. Regulations are legal acts hierarchically subordinate to acts of parliament and issued by the government or administrative bodies. The government commissioner for gender policy also works with civil society.³⁰

Traditionally not all professions are equally open for women as for men, as in other states of the former Soviet Union. Certain professions are deemed too dangerous for women and in some cases are still now subject to a statutory employment prohibition. The resulting differentiation between “male” and “female” professions also manifests itself culturally. Thus the Böll study concludes that employment in the energy sector is seen as “physically hard work” and therefore remains reserved for men. Various surveys show that the traditional gender role assignments are still anchored in society, so that, for example, bringing up and caring for children and housekeeping are often seen as the task of mothers / women.³¹ The ability to reconcile family and professional life is additionally restricted by the Labour Code, which stipulates that business trips for women with children of up to three years of age are prohibited. Companies which do not comply with this requirement must pay fines.³²

In the course of the institutionalisation of gender policy, the Ministry of Health repealed Regulation No. 256, with 450 professions prohibited for women, in 2017.³³ However the prohibition on mining work remains in force.³⁴ The underrepresentation of women in the energy sector, particularly in the oil and gas industry, is largely attributable to the earlier employment bans³⁵, which were accepted by society. In order to increase the political participation of women, in 2019 the Ukrainian government introduced for the first time an obligatory gender quota for local elections. Since then it has been required that each electoral list must include two female and male candidates.³⁶ As yet there are no binding or voluntary gender quotas in Ukraine to increase the share of women in management positions in companies.³⁷

²⁶http://www.ukrstat.gov.ua/operativ/operativ2020/m&w/v_osvita.htm

²⁷ Ibid.

²⁸ See infographics: Women and Men in the Energy Sector of Ukraine, Heinrich-Böll-Stiftung Kiev, p. 5: https://ua.boell.org/sites/default/files/infographic_women_and_men_in_ukrainian_energy_eng.pdf

²⁹ <https://zakon.rada.gov.ua/laws/show/2866-15>

³⁰ <https://www.kmu.gov.ua/npas/250049925>

³¹ <https://ukraine.unfpa.org/sites/default/files/pub-pdf/Analytical%20research%20on%20women%27s%20participation%20in%20the%20labour%20force%20in%20Ukraine%20%28EN%29.pdf>

³² Article 177 of the Ukrainian Labour Code: [https://zakon.rada.gov.ua/laws/main/322-08?utm_medium=refer&utm_source=www.kadrovik01.com.ua&](https://zakon.rada.gov.ua/laws/main/322-08?utm_medium=refer&utm_source=www.kadrovik01.com.ua&utm_term=5296&utm_content=news&utm_campaign=red_block_content_link_marker#Text)

[tm_term=5296&utm_content=news&utm_campaign=red_block_content_link_marker#Text](https://zakon.rada.gov.ua/laws/show/z0051-94#Text)

³³ <https://zakon.rada.gov.ua/laws/show/z0051-94#Text>

³⁴ The prohibition goes back to the agreement between Ukraine and the International Labour Organisation (ILO) on the deployment of women in underground work in mines of any kind.

https://www.ilo.org/dyn/normlex/en/f?p=NORMLEXPUB:12100:0::NO::P12100_ILO_CODE:C045

³⁵https://ua.boell.org/sites/default/files/genger_in_energy_report_2019.pdf

³⁶ <https://zakon.rada.gov.ua/laws/show/396-20#Text>

³⁷ <https://50vidsotkiv.org.ua/do-rady-vdruge-podaly-zakonoprojekt-pro-genderni-kvoty-u-naglyadovyh-radah-derzhpidpryemstv/> and <https://ua.boell.org/uk/2019/07/22/chomu-potribno-skorochuvati-genderni-disproporciyi-v-energetichnomu-sektori>

Social framework conditions

The field of civil society engagement for more gender equality is highly developed in Ukraine and is supported locally, nationally and internationally.

Projects like The STEM IS FEM project³⁸ aim to increase the share of women in technical professions in that they encourage girls to take an interest in STEM professions and venture into male-dominated working environments. Girls and young women can apply for a free mentoring programme in which professionally established female experts introduce them to technical branches of industry. In the long-term this creates a continually growing women's network in which mentees later become mentors themselves. The initiative Girls STEM³⁹ of CSR Ukraine, a non-profit organisation for corporate social responsibility, also hopes to raise awareness among girls and young women about career opportunities in technical professions. Each year the CSR Ukraine Centre chooses the 20 most inspiring women from STEM professions. They include top managers from tech companies, scientists and representatives of ministries, universities and public organisations.

The non-governmental organisation Poruch⁴⁰ has also set itself the goal of promoting young people by developing the next generation of managers. Since its establishment in September 2011 Poruch has supported social movements and thus strengthens civil society in Ukraine. Its agenda includes both the promotion of gender equality in society and boosting the capacity of civil society organisations with expert knowledge and resources. Its individual activities include educational projects and training initiatives. Poruch is internationally networked and cooperates in numerous events with the Swedish Institute, the Norwegian Institute for Urban and Regional Research and the European Commission. In the energy sector Poruch is implementing a project for gender equality in the workplace with the support of the organisation USAID Energy Security Project (ESP).⁴¹

ESP is an energy sector-related non-governmental organisation funded by the United States Agency for International Development (USAID).⁴² ESP operates on the interface between politics, the private sector and civil society and supports the Ukrainian government in improving the reliability of supply in the country and increasing the growth potential of the domestic energy

sector. In these different activities, gender integration plays a central role. ESP thus promotes the integration of women in male-dominated environments, creates opportunities for women to acquire technical skills and management competencies and observes the effects of the energy markets on women and disadvantaged groups. Since 2019 ESP has cooperated with the women's network Women's Energy Club of Ukraine (WECU) and supports it in its professional development. In order to ensure equal rights and opportunities for women and men, ESP conducts a training programme for employees of power supply companies. So far the national electricity transmission network operator Ukrenergo and public utility company Kyivteploenergo have taken part. Following these training courses various companies have established gender committees, the first of their kind in Ukraine. In order to increase the visibility of women in the energy sector, ESP organises roundtables and promotes dialogue between the stakeholders.

Ukraine has been supported in the implementation of international standards for gender equality since 1999 by UN Women⁴³, a body of the United Nations, as part of the country's "Sustainable Development Goals" strategy. In cooperation with governments and civil society organisations UN Women Ukraine focuses on three main areas: the area of governance and participation focuses on legislative and executive power, aiming to ensure that gender equality is taken into account in legislative proposals, reforms, national and local decision-making processes and planning and budgeting, so as to ensure that women have equal opportunities to participate in the running of the government and the justice system. The second focal point includes changing social standards, attitudes and behaviour, with the aim of eliminating discrimination and violence against women. The third main focus aims to ensure that women are as equally represented in peace processes and security initiatives as men.⁴⁴

Women's networks

Founded in 2016, Women's Energy Club of Ukraine⁴⁵ (WECU) is the first and only industry-specific women's network in the energy sector. It is organised as an association with voluntary activists and its establishment was supported by the Regional Office for Ukraine of Heinrich-Böll-Stiftung and the European-Ukrainian Energy

³⁸ <https://stemisfem.org/en>

³⁹ <https://girls-stem.org/?lang=en>

⁴⁰ <http://poruch.ua/en/about-us-2>

⁴¹ http://poruch.com.ua/poruch_energy_gender/

⁴² <https://energysecurityua.org/what-we-do/environmental-and-social/>

⁴³ <https://eca.unwomen.org/en/where-we-are/ukraine>

⁴⁴ <https://eca.unwomen.org/en/digital-library/publications/2019/04/ukraine-its-time-gender-equality-brochure>

⁴⁵ WECU was established in connection with the energy conference European-Ukrainian Energy Day on 5 November 2016 as an informal women's club. The association was officially founded in 2018. The information was provided by founding member Oksana Aliyeva.

Agency. The founders are Oksana Aliyeva, Programme Coordinator for Climate and Energy Policy in the Regional Office for Ukraine of Heinrich-Böll-Stiftung, Valentyna Beliakova, former director of the European-Ukrainian Energy Agency and current President of WECU, Maryna Ilchuk, Senior Partner at the Kiev office of international corporate law firm CMS Cameron McKenna Nabarro Olswang, Svitlana Holikova, Director of PP Transenergoconsulting, and Yulia Burmistenko, MD's Consultant for International Matters at DTEK. The number of members has increased since its establishment to 200, including many influential personalities like female representatives of Ukrainian and international organisations who participate in reforms of the energy sector and members of the Ukrainian parliament. The WECU is funded by its members, certain energy companies where members of the club are employed and campaign for gender equality initiatives, as well as international organisations operating in Ukraine. They include Heinrich-Böll-Stiftung, Gesellschaft für Internationale Zusammenarbeit (GIZ), the United States Agency for International Development (USAID) and embassies. The primary objective of WECU is to increase the share of female employees in the energy sector and minimise the gender gap. WECU's activities⁴⁶ include events, training courses, study trips and also research initiatives, for example concerning the working environment of women in the energy sector. The Böll study "Women and Men in the Ukrainian Energy Sector" came about thanks to WECU's engagement, as well as the efforts of energy companies DTEK and Ukrenergo to make a contribution to gender equality. Ukrenergo was distinguished by WECU in 2019 as the first company to introduce a gender policy. With the competition "Women of the Ukrainian Energy Sector" the women's network recognises women's contribution to the development of the Ukrainian energy sector, raises the profile of female role models and motivates young women and girls to follow their example.

Besides WECU there are a series of further women's networks that are not specifically for the energy industry. They include, for example, Business Ukrainian Women⁴⁷, which aims to strengthen the role and participation of women in society, and the International Embassy of Female Entrepreneurs⁴⁸, which following the example of the European Network of Female Entrepreneurship Ambassadors was established in 2006 in cooperation with the Polish network of the same name. The supra-regional women's network Ukrainian Women's Fund (UWF)⁴⁹

INFOBOX DENA-INTERVIEW



Dr. Natalia Slobodian

Dr. Natalia Slobodian studied humanities and only came into contact with the energy sector in connection with her postdoctoral thesis. Its topic was the foreign policy of the United States and the Russian Federation in the Persian Gulf, focusing on energy policy and terrorism. This was followed by project management roles for research projects in the areas of energy security and diplomacy and energy policy. Dr. Slobodian worked in the energy department at the International Centre for Policy Studies in Kiev. She is a former member of the Public Council at the Ministry of Energy and Coal Industry of Ukraine. She cooperated with the Pulaski Foundation and the National Centre for Strategic Studies in Poland. She was also awarded a grant by the Polish Skubiszewski Foundation. At transmission network operator Ukrenergo she was head of strategic planning, analysis and international studies. Dr. Slobodian currently works as department head for climate change and environment protection at energy company DTEK.

She is a member of Women's Energy Club of Ukraine (WECU) and campaigns for gender equality in energy companies.

Based on her experience she recommends the following measures to strengthen women in the energy sector:

- Skills development and training
- Mentoring
- Introducing female role models
- Offering network opportunities
- Improving recruitment and employee loyalty
- Flexible working hours and part-time models
- Recognising the achievements of women in the energy industry and energy policy
- Securing access to financing and capital for female entrepreneurs
- STEM educational programmes

"The renewable energy industry offers women more attractive job opportunities than the other branches of industry. On average women are offered higher salaries than in other branches of industry. Working conditions are slowly improving and energy companies are becoming more family-friendly. Women can fulfil their professional potential in the energy sector and enjoy a successful career if they are bold. The energy sector and particularly the energy transition can only benefit from this."

⁴⁶ <http://www.wecu.com.ua/en/>

⁴⁷ <http://businesswomen.org.ua/index.php/about>

⁴⁸ <http://ambasada.org.ua/%D0%BF%D1%80%D0%BE-%D0%B0%D0%BC%D0%B1%D0%B0%D1%81%D0%B0%D0%B4%D1%83/>

⁴⁹ <https://www.uwf.org.ua/en/>

supports civil society organisations from Ukraine, Moldova and Belarus which campaign for gender equality and the strengthening of women. Its offering includes support services in the areas of finance, knowledge and consulting. Examples of its achievements from 2018 show how effective the women's network is⁵⁰: supporting the establishment of 74 women's networks and initiative groups, funding 27 already existing organisations and initiatives to help them increase their capacity, creating new jobs, and over 500 successfully completed funding programmes.

Conclusion

Women are underrepresented in Ukraine's energy sector, with a share of less than 30 per cent, and tend to occupy worse paid positions compared to men, even though they are often better educated and better qualified. They find that they are confronted with gender-related barriers that obstruct their career in the energy sector. Working conditions make it difficult to reconcile professional and family life. Career jumps to the highest levels of management tend to be reserved for men in the traditionally male-dominated sectors. Not all professions are given equal social recognition for the two genders. Traditional role expectations and stereotypes are persistent and as a result girls are encouraged less in technical subjects and thus fewer women are educated in STEM subjects than men.

But things are happening in politics, industry and civil society: Energy companies that promote gender equality attract more women than conservative companies. With the introduction of a government office for gender policy in 2017 Ukraine began to implement gender equality in an executive capacity. Employment bans for women have been abolished.

Civil society, in particular, champions gender equality. Besides individual initiatives and programmes in the area of STEM subjects, the Ukrainian non-governmental organisation Poruch, as an established civil society player, plays a key role in promoting gender equality. Together with USAID ESP it implements specific projects in the energy sector. Above all the establishment of the first industry-specific women's network WECU as a civil society institution networked with other players in civil society resulted in greater awareness of gender issues in the world of work.

Members of WECU benefit from exchanging of knowledge and experience, as well as mentoring and cooperative

collaboration, and as a result are able to strengthen their skills and career opportunities. The women's network has great potential to establish itself as a voice for female energy experts and present industry-specific challenges and possible solutions for more gender equality to politics and industry. Hitherto, the members of WECU have acted as multipliers, in that they strengthen awareness of the need for action in their respective organisations. There is great potential here for bringing about lasting change to the working culture and organisational structures in the energy industry. The first pioneer companies are already visible and are assuming a role as trailblazers. In politics too there are influential female role models. Thus the first female energy minister of Ukraine Olha Buslavets showed that women too can take on leadership positions in energy policy. Thanks to her example, other well-educated female experts followed her into the ministry.⁵¹

The approaches to the promotion of gender diversity in the energy transition most frequently stated by Ukrainian participants in the dena survey primarily relate to changes of the working and corporate culture to achieve greater gender equality, for example flexible working hours models, the introduction of a gender policy and the implementation of appropriate measures in companies, making female role models more visible, extending networks that promote women, as well as support by both male and female colleagues and management personnel of both genders.⁵²

The women's network WECU recommends, in particular, developing educational and careers advice programmes for women that aim to overcome gender stereotypes in career choices and network women with each other at an early stage. Above all, the promotion of talented girls/young women is decisive in bringing about a lasting change in gender relations and ensuring that girls and boys have equal development opportunities. Women who are already professionally successful and become visible play an important function as role models for girls and young women. They show that besides male experts there are also successful female experts in male-dominated areas. They can provide advice for career decisions and inspire young women in their own professional development. Mentoring programmes that bring together female energy experts and career starters allow girls and young women to learn and gain self-confidence from their mentors.

⁵⁰ See annual report 2018: <https://uwf.org.ua/en/Category/reports/>

⁵¹ This assessment is based on an interview with Yuliia Rybak, Consultant and Coordinator for International Cooperation for

the energy minister in office up to the end of November 2020 / the current acting energy minister Olha Buslavets. Yuliia Rybak is also a member of the women's network WECU.

⁵² See appendix

Country profile – Kazakhstan

With a gender gap of 29 per cent, Kazakhstan is in 72nd place in the world ranking and therefore behind Ukraine and just ahead of Russia, but far ahead of Turkey and Iran.⁵³ Kazakhstan is still almost 26 per cent short of economic equal opportunities for women. It is 87 per cent away from political equality. Thus the values for Kazakhstan are average for the Eastern Europe and Central Asia region.⁵⁴ While in the economic dimension Kazakhstan performs better compared to the worldwide average for the gender gap of 42 per cent, in the political dimension the country is below the worldwide average gender gap of 75 per cent.

Labour market

The employment rate in Kazakhstan stood at almost 77 per cent in 2019.⁵⁵ Of women fit to work almost 72 per cent⁵⁶ were in gainful employment, compared to 82 per cent⁵⁷ of men fit to work. The share of women in the country's total workforce amounted to 48 per cent in the same year and thus is around the same level as in Ukraine and Russia.⁵⁸ Compared to Ukraine and the other countries examined, in Kazakhstan the number of men and women in gainful employment is the highest. Nevertheless the labour market has some gender-specific characteristics. While women account for a large share of the employees in less well-paid sectors, predominantly in the areas of education, social services and the hospitality sector, in better paid sectors like the energy sector they are underrepresented compared to men. The largest share of women is found in the service sector at 55.4 per cent. In agriculture 42.4 per cent of employees are women. The smallest share of employment of women compared to men is found in industry and construction: while men make up the majority of the employees at 71.6 per cent, the share of women stands at 28.4 per cent.⁵⁹

The energy sector plays a central role for Kazakhstan's economic stability and prosperity. It contributes around a quarter of national gross domestic product (GDP), most of which is attributable to the oil industry.⁶⁰ The

renewable energy sector is in its infancy and mainly consists of hydroelectric power. The potential for wind and solar energy is considered high.⁶¹ Both political decision makers and companies are increasingly recognising that strengthening the female workforce has a positive effect on companies' business results and the sustainability of the energy sector. In the course of the energy transition new employment opportunities may arise for women. The authors of the so-called KAZ study come to this conclusion.⁶²

As there was no industry-specific data on the participation of women in technical professions and management positions, the association Kazenergy examined the role of women in the energy sector for the first time together with the European Bank for Reconstruction and Development (EBRD).⁶³ The results of the KAZ study were published in April 2020. The study is based on a survey of 55,000 employees from 36 energy companies carried out from 2016 to 2019. The KAZ study clarifies the gender distribution in Kazakhstan's energy sector for the first time and analyses the reasons for the unequal distribution. As in Ukraine women account for only a quarter of total employment in the energy sector, at an average of 24 per cent. In the subsectors of the oil and gas industry, electricity supply and the mining industry, the share of female employees, at 24 to 26 per

⁵³ Country score card Kazakhstan, Global Gender Gap Report 2020, World Economic Forum, p. 205

⁵⁴ The gender gap for the Eastern Europe and Central Asia region amounts on average to 27 per cent in the economic dimension and 85 per cent in the political dimension. Figure 8, Regional Performance 2020, Global Gender Gap Report 2020, p. 22

⁵⁵ <https://data.worldbank.org/indicator/SL.TLF.ACTI.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

⁵⁶ <https://data.worldbank.org/indicator/SL.TLF.ACTI.FE.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

⁵⁷ <https://data.worldbank.org/indicator/SL.TLF.ACTI.MA.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

⁵⁸ <https://data.worldbank.org/indicator/SL.TLF.TOTL.FE.ZS?locations=UA-KZ-RU-UZ-IR-TR>

⁵⁹ https://gender.stat.gov.kz/page/frontend/detail?id=21&slug=-16&cat_id=7&lang=en

⁶⁰ <https://www.kazenergy.com/en/press-center/news/1994/>

⁶¹ https://www.german-energy-solutions.de/GES/Redaktion/DE/Publikationen/Marktanalysen/2019/zma_kasachstan_2019_solar-wind.pdf?__blob=publicationFile&v=4

⁶² http://www.Kazenergy.com/upload/document/operation/role_en.pdf

⁶³ The role of women in the energy sector in Kazakhstan, EBRD/Kazenergy, 2020

cent, was higher than in the renewable energy sector. Here women were represented with a share of employment of 17 per cent. At the management levels of the respondent companies the underrepresentation of women in the energy sector is even more marked: 17 per cent of executive board members were women. The share of women in leading management positions stood at 12 per cent. In one third of the respondent companies there wasn't a single woman on the executive board, and in half of the companies there wasn't a single woman at the top management level.

For comparison: Across all sectors of the economy 43 per cent of small and medium-sized businesses are run by women.⁶⁴ State-run and partly state-run companies are predominantly run by men. Here the share of women stands at 5 to 7 per cent.⁶⁵ The gender distribution thus varies according to sector and company size.

In the energy sector women's shares in employment are larger on average at lower hierarchical levels. The share of women in middle management stood at 20 per cent and in positions without management responsibility at 26 per cent. The underrepresentation of women is even more pronounced in technical and operational management positions. Here women account for 10 per cent of the positions in middle management, while the share of women in commercial and administrative functions at the same level amounts to 43 per cent. The total share of women in the technical and operational area of employment stands on average at 19 per cent. It is conspicuous that women mostly hold higher positions here, for example as engineers, and are better educated than men. 64 per cent of the women employed in the energy sector hold a university degree, while for the men employed in the sector the figure is only 48 per cent. This indicates that the underrepresentation of women in management positions is not attributable to a lack of qualified female personnel.⁶⁶

As a rule, more women than men obtain a degree from a university or polytechnic. In 2019 the share of women stood at almost 56 per cent and the share of men at around 44 per cent.⁶⁷ The Global Gender Gap Report confirms that women generally aim for higher educational qualifications than men. The enrolment rate in tertiary education (e.g. polytechnics and universities) stands at 60 per cent for women and 48 per cent for men.⁶⁸ Nevertheless the share of women among students

with degrees in STEM subjects is significantly lower than the share of men. Thus only around 15 per cent of female students obtain a degree in STEM subjects compared to 37 per cent of male students. In engineering and construction, as well as in manufacturing, the share of women stands at only 11 per cent and the share of men at 33 per cent.⁶⁹

The study by Kazenergy is also based on an investigation of the professional development of women and men in the energy sector. A comparison of promotion rates for female and male employees shows that women are promoted less frequently than men. The promotion rates for women are not only lower than for men. They also barely change over time. The authors of the KAZ study come to the conclusion that female careers stagnate in their development, which means that women reach higher management positions much less frequently than men.⁷⁰

The data on gender distribution suggests that there are barriers for women in the energy sector, which originate in various areas. The underrepresentation of women is attributable on the one hand to the fact that fewer women choose STEM or energy-related educational paths. On the other hand, internal company career opportunities and promotion processes do not have a positive effect on women, unlike men. The Kazakh participants in the dena survey from 2020 see antiquated working cultures and corporate structures dominated by men as the biggest barriers in the energy sector. With regard to starting a career and rising up the career ladder they consider the lack of networks that support women to be equally obstructive. Gender-specific prejudice, stereotypes and discrimination with respect to women are also specified as relevant barriers. The participants also see a lack of gender and inclusion strategies and measures in companies and in the legislature as barriers. Another reason why women are less encouraged to be professionally active in a sector dominated by men is the limited number of female role models.⁷¹

Political framework conditions

A series of far-reaching legislative and political frameworks are intended to improve the equality of opportunities between women and men in Kazakhstan. The Act on National Guarantees of Equality and Equal Opportunities for Women and Men enacted in 2009 prohibits sexual discrimination and requires equal

⁶⁴ <https://kapital.kz/business/85253/zhenshchin-zanyatykh-v-msb-stanovit-sya-bol-she.html>

⁶⁵ <https://vlast.kz/novosti/42238-dola-zensin-v-sisteme-upravlenia-vse-ese-nizkaa-tokaev.html>

⁶⁶ Ibid.

⁶⁷ https://gender.stat.gov.kz/page/frontend/detail?id=39&slug=-33&cat_id=8&lang=en

⁶⁸ Country score card Kazakhstan, Global Gender Gap Report 2020, World Economic Forum, p. 205

⁶⁹ Ibid.

⁷⁰ The role of women in the energy sector in Kazakhstan, EBRD/Kazenergy, 2020

⁷¹ See appendix

employment opportunities with regard to recruitment, working conditions, promotion and training for women and men. The Labour Code of 2015 prohibits discrimination against women in employment relationships and requires equal pay for the same work. It also permits flexible employment contracts and secondary employment, as well as a series of benefits for working parents such as parental leave. Nevertheless the act contains a list of professions for which an employment ban for women still exists, as in Ukraine.⁷² In the energy sector there are employment bans for women in the areas of electrical engineering, fuel production, underground oil and gas production and installation and maintenance of oilfield structures.⁷³ The Labour Code also includes special restrictions with regard to working hours and business trips for pregnant women and women with children from zero to seven years of age. Even though the statutory restrictions are intended to protect pregnant women and mothers, they are based on an assumption that women's main responsibility concerns motherhood and bringing up children.⁷⁴

The most important institution for gender equality is the National Commission for Women, Family and Demographic Policy.⁷⁵ It advises the president and was responsible for the implementation of the national gender equality strategy from 2006 to 2016, as well as for the monitoring. The commission has a board of experts that consists of non-governmental organisations and scientific representatives. The commission has regional representative offices throughout the country, as well as in the cities, which are subordinate to the respective office of Akim, i.e. the chair of the local administration. An Academy of Public Administration operates under the President of the Republic. It is responsible for regularly training government representatives in the areas of equal rights and gender equality. The new strategy for family and gender policy for the period up to 2030 envisages the extension of the training to include both male and female officials and includes, under among other things, budget planning for gender policy.⁷⁶

The priority objectives for the new strategy are: increasing the share of women in technically-oriented educational professions, combating discrimination

against women in non-traditional professions and further reduction of statutory employment bans for women. The strategy also includes a proposal to gradually increase the share of women on public executive boards and in companies with state participation from the current 5 to 7 per cent to 30 per cent in the period up to 2030. This is aimed at ensuring the participation of women in decision-making processes.⁷⁷ The wage gap between the genders is also to be gradually reduced, with the aim of narrowing the gap to one quarter by 2030.⁷⁸

The institutional basis and the government's gender strategy are an important step in the right direction for the improvement of political and economic equality for women. However, the inadequate monitoring of the measures for the implementation of the strategy, particularly the integration of the objectives into laws and political projects at the regional level, is criticised.⁷⁹ The barriers for women currently remain high. Employment bans for women prevent or impede their access to the labour market in the energy sector, which is still associated with male professions. Negative stereotypes and discriminatory misconceptions with respect to women deter them from pursuing a career in the energy sector or well-paid related technical sectors. Appropriate working conditions enabling professional and family duties to be reconciled are also lacking.⁸⁰

Social framework conditions

The social framework conditions in Kazakhstan are largely characterised by industry's strong commitment. One third of the companies surveyed by Kazenergy and EBWE have implemented proactive initiatives for furthering equal opportunities over and above the statutory requirements, such as maternity protection / maternity leave or general anti-discrimination rules. According to the KAZ study, one example of a pioneer for equality strategies in industry is the largest energy holding company in Kazakhstan Samruk Energy.⁸¹ Samruk Energy is responsible for developing and implementing a national policy for the modernisation of existing power generation plants and the introduction of new ones in the long term.⁸² The company signed the Women's Empowerment Principles (WEPs), an initiative of UN Global Compact and UN Women, which lay down seven principles for

⁷² Kazakhstan Country Gender Assessment, December 2018, Asian Development Bank, p. 8 et seq.

⁷³ <http://adilet.zan.kz/rus/docs/U1500012597#z11>

⁷⁴ Ibid.

⁷⁵ <https://www.oecd.org/gov/Gender-Highlights-Kazakhstan.pdf>

⁷⁶ Ibid.

⁷⁷ <https://www.zakon.kz/5044879-uvlichit-kolichestvo-zhenshchin-v.html>

⁷⁸ <http://adilet.zan.kz/eng/docs/U1600000384/compare>

⁷⁹ Kazakhstan Country Gender Assessment 2018, Asian Development Bank:

<https://www.adb.org/documents/kazakhstan-country-gender-assessment-2018>

⁸⁰ The role of women in the energy sector in Kazakhstan, EBRD/Kazenergy, 2020, p. 80 et seq.

⁸¹ The role of women in the energy sector in Kazakhstan, EBRD/Kazenergy, 2020, p. 59

⁸² <https://www.samruk-energy.kz/en/company/company-today>

strengthening women in companies.⁸³ The principles offer guidance as to how companies can further gender equality in the workplace and in society. Other pioneers for equal rights and equal opportunities in the energy sector named in the KAZ study are oil company Tengizchevroil, the national Chinese oil corporation China National Petroleum Company (CNPC), Kazakhstan's national network operator Kazakhstan Electricity Grid Operating Company and oil and gas company Karachaganak.⁸⁴ These companies have defined the advancement of women as a priority for recruitment, employee loyalty and personnel development.

The driver of the women's movement and the promotion of gender equality in Kazakhstan is the European Bank for Reconstruction and Development (EBRD). The EBRD works with both the private sector and the Kazakh government. Its activities in Kazakhstan relate to the cooperation with companies in the male-dominated electricity and energy industries and are aimed at strengthening equal opportunities for women and men in the workplace. The fact that energy company Samruk Energy signed the UN Women's Empowerment Principles is also thanks to EBRD's engagement.⁸⁵ At a political level the EBRD works with the government of Kazakhstan and the National Commission for Women, Family and Demographic Policy to implement the action plan for the period 2020 to 2022. The EBRD supports the Kazakh government in taking down legal barriers that put women at a disadvantage in the labour market. With the support of the EBRD, 75 of a total of 287 occupational bans for women were repealed in 2018. The EBRD has resolved to work towards ensuring that further regulatory restrictions and occupational bans for women, particularly in the energy sector, are repealed.⁸⁶

Women's networks

Perhaps the most influential women's network in Kazakhstan's energy sector is the Kazenergy Women's Energy Club (KAZ WEC).⁸⁷ The network was established in 2013 at the initiative of the former President of Kazakhstan Nursultan Nasarbajew. Aizada Akkaisyeva, Financial Director of Kazmortransflot⁸⁸ and current chair of the club, was commissioned to organise and set up the women's network. She is supported by other successful

women from the energy industry and politics. KAZ WEC is based at business association Kazenergy, whose members predominantly come from the oil and gas industry. The women's network is part of the association's corporate social responsibility strategy and started out with the aim of calculating the share of female employees in the energy sector. KAZ WEC has now become established as a major force in national gender policy and cooperates at an international level with other women's networks, for example Powerful Women in Great Britain.⁸⁹

KAZ WEC has its own executive committee, which consists of over 20 female managers. The committee actively addresses the role of women in the development of the energy sector. The agenda includes the compatibility of professional and family life, work-life balance, mentoring programmes and strategies for women to thrive in the male-dominated energy world, among other things. The club works closely with the government of Kazakhstan and advises it primarily on gender policy issues. The government awards members of the club the Kurmet Medal, the medal of honour of the Republic of Kazakhstan, for outstanding professional services and the promotion of the women's movement.⁹⁰ The purpose of the awards is to raise the profile of professionally successful women in the energy sector and therefore highlight female role models. Since 2013 KAZ WEC has held bi-annual forums. The last one was held in 2019 as part of Kazakhstan Energy Week, under the title "The modern female leadership pattern in Energy". The focus was on the economic potential of women, their role in the development of the energy sector, their leadership skills and the experience of energy companies in the advancement of women.⁹¹ KAZ WEC regularly organises network meetings at other energy companies in order to encourage women to establish their own internal company clubs, network with each other and benefit from cooperative collaboration and also from the coaching services. How many offshoots have now been established based on KAZ WEC's example is unknown. However, the total number of members of KAZ WEC exceeds 10,000 women. According to the assessment of the chair of KAZ WEC, the initiative arouses a great deal of

⁸³ <https://www.unwomen.de/aktuelles/womens-empowerment-principles-weeps.html>

⁸⁴ The role of women in the energy sector in Kazakhstan, EBRD/Kazenergy, 2020, p. 66 et seq.

⁸⁵ The role of women in the energy sector in Kazakhstan, EBRD/Kazenergy, 2020, p. 4

⁸⁶ Ibid.

⁸⁷ <https://www.Kazenergy.com/ru/operation/the-development-of-human-capital/51/173/>

⁸⁸ Kazmortransflot is a state-owned Kazakh company in the transport sector. The company is responsible for developing the

national merchant fleet. Its main activities include crude oil transportation. See: <http://www.kmtf.kz/en/about/index.php>

⁸⁹ <https://powerfulwomen.org.uk/2019/11/28/supporting-women-from-kazakhstan-to-the-uk/>

⁹⁰ The following members of WEC have received the medal: Aizada Akkaisyeva, Sholpan Altybayeva (Chevron Eurasia Business Unit), Asiya Syrgabekova (KazMunayGas) and Rysty Tasmagambetova (Embamunaigas JSC).

⁹¹ The modern female leadership pattern in Energy, p. 55 et seq.: https://www.Kazenergy.com/upload/document/brosh/brochure_ZEK_en.pdf

INFOBOX DENA-INTERVIEW



Dr. Aizada Akkaiysyeva

Dr. Aizada Akkaiysyeva is the Chair of the Kazenergy Women's Energy Club. She participated in and supported the establishment and setting up of the club. Aizada Akkaiysyeva has received several awards for her work: She was awarded the Kurmet Medal, the medal of honour of the Republic of Kazakhstan, and has received awards from both the Minister for Economy and Trade and the Minister for Energy and Mineral Resources and been recognised for her contribution to the development of the oil and gas industry. Her former employer KazMunayGas acknowledged her for her professionalism. She holds an honorary title awarded by the National Engineer's Academy, where she completed her doctorate in economic sciences. Ms Akkaiysyeva currently works as Financial Director at shipping company Kazmortransflot UK Ltd. in London, is married and has four children. Having obtained a degree in industrial engineering from the Russian state-owned Gubkin University for Oil and Gas she began her professional career in the academic world. Among other things she worked as a lecturer and Vice-Dean at the Institute for Economy and Management at the University of Aktau. Later she worked at the foreign ministry and in a managerial position at the Ministry for Economy and Trade, before switching to the corporate world. At petroleum company KazMunayGas, which belongs to the state-owned company Samruk-Kazyna, she headed the department for business planning and economic analysis before being promoted to the position of Financial Director. Subsequently she was employed as Chief Expert at the Department for Oil, Gas and Industrial Assets at Samruk-Kazyna. After that she switched, as Financial Director, to national shipping company Kazmortransflot, a subsidiary of KazMunayGas.

"Throughout my entire professional career the positions of managing director or chairman of the executive board were always held by men. Nevertheless, I myself always worked in key positions. I grew up in a positive family environment and during my career have received a great deal of support from my family, my husband and, above all, my mother-in-law. I have no doubt that if a woman sets herself a certain goal, she can achieve it! Never give up and stay positive. With this attitude I have succeeded in reconciling my professional and family life."

interest on the part of employed women, as well as the companies for which they work.⁹²

In 2013 petroleum company Tengizchevroil (TCO) set up its own women's network, Women's Networking (WN). WN's aim is to specifically encourage women to develop professionally, as well as create a nurturing working environment that enables networking and enables women to find a mentor (male or female) within the company, learn new skills and increase their self-confidence, whilst also facilitating the exchange of knowledge and experience. WN regularly organises discussion rounds, workshops and other events to provide advice to its members in the areas of work-life balance, management skills and returning to work after parental leave. According to the KAZ study, TCO is the only large company in Kazakhstan with a female managing director. 27 per cent of the top management positions are held by women. In total 27 per cent of the employees at TCO are women. The share of women in middle management amounts to 29 per cent. TCO has declared diversity and inclusion to be one of its five central corporate values and has therefore anchored gender equality in the corporate strategy.⁹³

In spring 2019 the oil and gas company Karachaganak set up a women's network aimed at promoting the professional development of its female employees. The network's aim is to serve as a platform for members for exchanging professional experience and knowledge and support them in their professional development through interactions and cooperation.⁹⁴ Karachaganak's senior management has implemented a series of measures aimed at increasing the share of women at different hierarchical levels. Between 2018 and 2019 the number of the women among the senior management increased from zero to four of a total of eleven top managers. According to the assessment of the managing director, as a result the quality of conversations and decision-making has very much improved.⁹⁵

Besides the recently established internal company women's networks in the energy industry, in Kazakhstan predominantly cross-industry initiatives exist, which focus on strengthening female entrepreneurs and company founders. In Kazakhstan, women mostly set up sole proprietorships in the service sector. They benefit from the flexibility that self-employed status brings and can thus better reconcile family and professional life than they would be able to if they were employed by a

⁹² The detailed information on the Kazenergy Women's Energy Club originates from a qualitative interview with Aizada Akkaiysyeva, Chair of the Club and Financial Director of Kazmortransflot UK, conducted on 18 November 2020.

⁹³ The role of women in the energy sector in Kazakhstan, EBRD/Kazenergy, 2020, p. 70

⁹⁴ Ibid., p. 67

⁹⁵ Ibid.

company with fixed attendance requirements. Women are significantly overrepresented in sole proprietorships: 66 per cent of all sole proprietorships are run by women and a little less than half of small and medium-sized companies (SMEs). Women thus contribute almost 40 per cent to GDP, with a rising trend.⁹⁶

In order to support women in the expansion of their business activities, the Kazakh Ministry of Economic Affairs established Women in Business in 2015 with the EBRD. It supports and strengthens SMEs set up or run by women. Low-interest bank loans make it easier for female company founders and entrepreneurs to gain access to financing. The support programme also includes mentoring by experienced consultants (both male and female), who provide support for the strategic development and expansion of SMEs and provide guidance throughout the process. In order to benefit from the services provided by Women in Business, female entrepreneurs must apply for a funding programme within the framework of the initiative.⁹⁷

Support mechanisms to strengthen female entrepreneurs have been set up at national level too. The Council of Businesswomen operates at the national chamber of commerce (Atameken).⁹⁸ Specifically businesswomen in regional and rural areas, who on average are less competitive than working women in cities, are supported. Discrete councils of businesswomen operate from the regional and local chambers to ensure that support can be provided nationwide. The councils are supported by the National Commission for Women's Affairs and Family and Population Policy. The aim of the Council of Businesswomen is to increase the economic participation of women by creating possibilities for mutual exchanging of experience and knowledge and offering support services with regard to the founding and financing of SMEs. The council is not only active at a regional and local level. It also networks internationally and would like to help ensure a positive perception of the image of Kazakh businesswomen in foreign business circles.⁹⁹

The oldest women's network in Kazakhstan is the Association of Businesswomen of Kazakhstan.¹⁰⁰ Founded in 1995 it now has approximately 15,000 members and is an established institution. Similarly to the Council of Businesswomen of Atameken, the association supports female entrepreneurs in the establishment of a company, as well as in the management of existing ones. The association not only promotes innovative women's business models, it also strengthens their networking and acts as their voice by representing its members interests.

The association aims to strengthen the economic participation of women in the business community and the status of businesswomen in public life. Similarly to the Council of Businesswomen of Atameken the Association of Businesswomen of Kazakhstan has its own branches at regional, municipal, district and village level.¹⁰¹

Conclusion

Women in Kazakhstan account for almost half of the country's total workforce. They mainly work in the service sector, where low wages are paid. In industry and construction, two sectors in which higher income can be earned, women are underrepresented. The gender distribution varies according to sector and company size. In sole proprietorships and SMEs women are strongly represented. But management level positions in the energy sector are rarely held by women, even though the share of women here is larger than the overall average across all sectors of the economy. It is conspicuous that on average female employees in the energy sector are better educated than their male colleagues. Although in total more women study in Kazakhstan than men, they choose STEM subjects or energy-relevant subjects less frequently. Employment bans and statutory restrictions obstruct women's access to energy-relevant professions and contribute to the segregation of the labour market. As a result sociocultural prejudice and stereotypes are manifested, with the consequence that the energy sector is associated with male professions. These conditions deter women from pursuing a career in the energy sector or in well-paid related technical sectors.

However, political decision-makers and companies are increasingly recognising that strengthening the female workforce has a positive effect on business results and are introducing gender strategies and measures to actively increase the share of women. The strategy of the family and gender policy for 2030 laid down a firm institutional anchor for equal opportunities for women and men. The far-reaching measures are aimed at both raising awareness of gender-related issues among government representatives and officials and increasing the share of women in their own ranks. The aim is to increase, through quotas, the share of women in management level positions in public institutions and companies with state participation. Another aim is to make technical occupations more attractive for women and eliminate further employment bans. It remains to be seen to what extent access to the labour market in the

⁹⁶ <https://www.edgekz.com/businesswomen-in-kazakhstan-opportunities-and-challenges-they-face/>

⁹⁷ Ibid.

⁹⁸ Ramazanova Lazzat Kerimkulovna is the current chair.

⁹⁹ <https://atameken.kz/en/pages/300-sovet-delovyh-zhenshin>

¹⁰⁰ <https://www.businesswomen.kz/>

¹⁰¹ Ibid.

energy sector for women will noticeably improve as a result.

Political commitment is at a high level. The government acts as a strong partner and funder of initiatives aimed at strengthening the role of women and is provided by significant support by the EBRD. The initiation of the women's network KAZ WEC in 2013 by the President of Kazakhstan is an example of this. The first sector-specific women's network in the energy industry has now established itself as a relevant player. The establishment of KAZ WEC was followed by internal company offshoots in energy companies. Up to now, approximately one third of companies have introduced an own gender strategy and measures aimed at promoting equal opportunities over and above the statutory requirements. The pioneers

and drivers for the advancement of women are large corporations from the petroleum and gas industry. However, there are no women's networks or initiatives that focus on renewable energy sources / the energy transition. The results of the dena survey confirm that the biggest levers for women's careers are on the employer's side – female Kazakh energy experts see the most relevant solutions for improving gender equality in the energy sector primarily in the transformation of the working and corporate culture, which thus far has been dominated by man. They also consider the extension of women's networks, coaching services and more female role models to be important steps for strengthening women in the energy sector and ensuring equal opportunities for them.¹⁰²

¹⁰² See appendix

Country profile – Russia

With a gender gap of 29.4 per cent Russia is in 81st place in the world ranking and therefore behind Ukraine and Kazakhstan but far ahead of Turkey and Iran.¹⁰³ Russia is still 25 per cent short of economic equality for women and as much as 90.5 per cent short of political equality. Thus the values for Russia are average for the Eastern Europe and Central Asia region.¹⁰⁴ With regard to economic equality Russia is the leader compared to the other countries examined in this study, while the gender gap with regard to political participation is considerable. In this respect Russia lies far behind the global average of 75 per cent and also behind Ukraine, Kazakhstan and Turkey.¹⁰⁵

Labour market

The employment rate in Russia in 2019 stood at a total of 74 per cent.¹⁰⁶ Of that, 69 per cent of women fit to work¹⁰⁷ and almost 80 per cent of men fit to work¹⁰⁸ were in employment. Women account for half of the country's total workforce, with a share of 49 per cent.¹⁰⁹ The share of women is therefore almost as high as in Ukraine and Kazakhstan. More than half of the Russian population are women. Like in Ukraine, the share of women also amounts to almost 54 per cent.¹¹⁰ The total number of people employed as their main job in Russia amounted to approx. 71.3 million in the first quarter of 2020. Of that number 36 million were male and 35 million female. In Russia women and men participate in work other than self-employed work to almost the same extent. It is conspicuous that women employees are better educated on average than men, but women earn on average 30 per cent less.¹¹¹ 37.7 per cent of female employees held a higher educational qualification in 2016, compared to 29.4 per cent of male employees.¹¹² On average significantly more women strive for a university or polytechnic degree in Russia compared to men. In 2019

the enrolment rate for women in tertiary education stood at 89 per cent, while the rate for men was significantly lower at 75 per cent.¹¹³ Data on gender distribution for subject-specific educational qualifications is not available, so no statement can be made as to how many women have obtained a qualification in STEM subjects or other technical subjects compared to men.¹¹⁴ It should be assumed that women are still traditionally underrepresented here. According to the Federal Office of Statistics Rosstat, in 2019 women predominantly had their main employment in retail (19.7 per cent), education (16 per cent) and the health and social welfare system (13 per cent).¹¹⁵ They are strongly underrepresented in the construction sector (1.8 per cent) and in logistics and warehouse technology (4 per cent). With regard to professional, scientific and technical work as well as administrative work and related services, the shares of men (6.2 per cent) and women (5.3 per cent) employed in these areas as their main jobs are slowly converging.¹¹⁶

¹⁰³ Country score card Russia, Global Gender Gap Report 2020, World Economic Forum, p. 297

¹⁰⁴ The gender gap for the Eastern Europe and Central Asia region amounts on average to 27 per cent in the economic dimension and 85 per cent in the political dimension. Figure 8, Regional Performance 2020, Global Gender Gap Report 2020, p. 22

¹⁰⁵ Only Iran performs worse than Russia in the political dimension, with a gender gap of 96.3 per cent.

¹⁰⁶ <https://data.worldbank.org/indicator/SL.TLF.ACTI.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

¹⁰⁷ <https://data.worldbank.org/indicator/SL.TLF.ACTI.FE.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

¹⁰⁸ <https://data.worldbank.org/indicator/SL.TLF.ACTI.MA.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

¹⁰⁹ <https://data.worldbank.org/indicator/SL.TLF.TOTL.FE.ZS?locations=UA-KZ-RU-UZ-IR-TR>

¹¹⁰ <https://data.worldbank.org/indicator/SP.POP.TOTL.FE.ZS?locations=UA-KZ-RU-UZ-IR-TR>

¹¹¹ Women CEOs in Russia. Financial performance indicators, Deloitte, 2020: <https://www2.deloitte.com/ru/en/pages/research-center/articles/women-ceo.html>

¹¹² State Statistics Service Russia, table 6.6: <https://eng.gks.ru/labour>

¹¹³ Country score card Russia, p. 297, Global Gender Gap Report 2020

¹¹⁴ In the current Global Gender Gap Report 2020, in the country score card for Russia no information is given on gender distribution according to study subjects.

¹¹⁵ <https://rosstat.gov.ru/compendium/document/13265>

¹¹⁶ Ibid. In the period 2005 to 2019 the share of women in full-time employment increased from 3.6 per cent to 5.3 per cent. This represents a growth rate of 68 per cent.

The fuel and energy sector¹¹⁷ in Russia makes a significant contribution to national security and the socio-economic development of the country. In 2019 its share of GDP amounted to 25 per cent and accounted for more than half of state budget revenues.¹¹⁸ Approx. 4 per cent of all employees in the country work in the energy sector.¹¹⁹ The Russian National Statistics Service estimates the number of male employees in the electricity, gas and steam supply sectors, as well air-conditioning technology, at approx. 1.8 million and the number of women at approx. 400,000 in the first quarter of 2020.¹²⁰ Therefore 4.5 times as many men work in the energy sector as women. In other words: The share of women stands at 18 per cent and the share of men at 82 per cent. Official sector-specific data on the gender distribution of employees across all hierarchical levels is not available. The renewable energy sector in Russia is still small. But it is steadily growing and has great potential for economic growth and the creation of new jobs. Besides bioenergy, hydroelectric power is the largest subsector within the country's renewable energy market. In 2016 it already employed more than 65,000 people.¹²¹ The sector is sixth in the world ranking based on the number of jobs.¹²² With the increasing expansion of renewable energy, employment in this sector could increase to over 1 million in total by 2030.¹²³

Official data on gender distribution within the renewable energy sector is not available. However, to provide a general impression the employment figures of energy companies RusHydro and Inter RAO as published in the annual business report will be used. RusHydro is the largest producer of electricity from hydroelectric power in Russia, the second largest operator of hydroelectric power plants worldwide and the largest energy supplier in the country. In 2019 a total of just over 22,000 women and just over 47,000 men were employed full-time at RusHydro. The share of woman therefore stood at almost

32 per cent. With over 2,000 female managers and over 8,000 male managers, the share of male management personnel was four times higher than the share of female managers. By contrast, women are overrepresented at the level of technical staff, with a share of 62 per cent. A total of 13,000 female and 8,000 male technical staff were employed.¹²⁴ The gender distribution of the employees at joint stock company Inter RAO¹²⁵ is similar to that of RusHydro. Based on the sustainability report for 2019 one can calculate the shares of female and male employees along the hierarchical levels. The share of female managers thus stood at 26 per cent and the share of male managers at 74 per cent. At the level of technical staff the gender ratio is the other way round. Here the share of women stood at 65 per cent and the share of men at 35 per cent.¹²⁶

The gender distribution along the hierarchical levels across all sectors of the economy shows that women are generally well represented in middle management, with an average of 41.8 per cent compared to 58.2 per cent of men.¹²⁷ By contrast, in higher management positions they are significantly underrepresented. Approximately 20 per cent of the companies are run by women.¹²⁸ Although this figure has remained stable in recent years, it is still around 4.5 times higher than the worldwide average. It is striking that the share of women who participate in management varies sharply depending on the size of the company and sector. According to a study of Deloitte from 2020, women are traditionally better represented in the social sector in the areas of education, hospitality and health and account in these areas for 39 to 42 per cent of the highest management positions in the company. Only 6 to 7 per cent of the top positions in the mining and energy sector and in the upper levels of government are held by women. The share of women in the management of the 200 largest Russian companies amounts to 6.5 per

¹¹⁷ The fuel and energy sector in Russia includes the crude oil, gas, coal and peat industry, as well as the electricity and heating sectors.

¹¹⁸ <https://minenergo.gov.ru/node/13952>

¹¹⁹ <https://minenergo.gov.ru/node/1026>

¹²⁰ State Statistics Service Russia, table 2.29:

<https://rosstat.gov.ru/compendium/document/13265>

¹²¹ Renewable Energy and Jobs. Annual Review 2016:

https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2016/IRENA_RE_Jobs_Annual_Review_2016.pdf

¹²² Renewable Energy and Jobs. Annual Review 2020, p. 16:

https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2020/Sep/IRENA_RE_Jobs_2020.pdf

¹²³ Remap 2030. Renewable Energy Prospects for the Russian Federation, April 2017, p. 20: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2017/Apr/IRENA_REmap_Russia_paper_2017.pdf

¹²⁴ RusHydro, Annual Report 2019, Appendices, p. 461:

http://www.eng.rushydro.ru/investors/disclosure/annual_financial_reports/

¹²⁵ Inter RAO is a holding company that operates in several energy segments. These include electricity and energy production, electricity supply, international energy trading, energy technology, distribution network management abroad and energy export. The energy production plants of Inter RAO include thermal and hydroelectric power plants. See:

<https://www.interrao.ru/en/company/>

¹²⁶ Annual Report 2019. Sustainable Development and Environmental Sustainability Report, PJSC Inter RAO, p. 169

¹²⁷ Country score card Russia, p. 297, Global Gender Gap Report 2020

¹²⁸ Ibid.

cent.¹²⁹ In politics women have an almost 16 per cent share in parliament and almost 13 per cent in ministerial positions.¹³⁰

In the dena survey the Russian participants most frequently specified gender prejudice and discrimination against women as the most relevant barriers obstructing women's access to the labour market and a career in the energy sector. They experience disadvantages due to antiquated working cultures and corporate structures, which are largely dominated by men. There is a lack of gender policies and measures for the advancement of women on the part of companies and the government / legislature where women do not participate in decision-making processes. As further barriers for professional development in the energy sector the participants specified a lack of female role models and a lack of self-confidence to be successful.¹³¹

Political framework conditions

Russia's gender policy is caught in an area of tension between international obligations to guarantee equal rights for women and men on the one hand and the historical and cultural traditions of Russian society on the other.¹³² In 2017 the Russian government created a legal framework for fulfilling the obligations under the United Nations Convention on the Elimination of All Forms of Discrimination Against Women. The key component is the National Strategy for Women for the period 2017 to 2022, which provides for the creation of appropriate conditions for full and equal participation of women in the political, economic, social and cultural spheres of society.¹³³ The strategy is implemented in five different dimensions: Improving conditions for the protection of women's health, improving the economic status of women and securing their welfare, improving access to professional education and prevention of social disadvantages for women and violence against women, increasing the

participation of women in public and political life and improving the statistical data resources for the assessment of the current situation of women in society.¹³⁴

The adoption of the national strategy for the advancement of women was preceded by many years of negotiations and fierce discussions, which resulted in already existing state structures of central importance for gender equality being abolished after 2012.¹³⁵ They include the Commission for Women, Family and Demographics under the Russian President, the Commission for Women's Affairs under the Chairman of the Government and the Centre for Gender Competence under the Council.¹³⁶ While the focus of gender policy in the 2000s was on the economic status of women and securing equal income from economic activities, it later switched to typical "women's issues", which were considered exclusively in connection with demographics, the family and children.¹³⁷ This orientation attracted criticism.¹³⁸ The step back in gender policy was also reflected in the Global Gender Gap Index. In the period 2013 to 2019 Russia fell in the worldwide ranking from 52nd to 81st place, because the gender gap between women and men had increased.¹³⁹ However, gender equalities predominantly relate to the political participation of women. In 2019 Russia was in 122nd place in this dimension out of just over 150 countries worldwide. In the economic dimension it ranked 32nd.¹⁴⁰

The national strategy for the advancement of women, despite all the criticism, is an important first step and shows that the political will exists to close the gender gap. Nevertheless the preservation of traditional family values plays a major role in Russia's women's policy, as can be seen particularly in the current reforms of demographic and family policy.¹⁴¹ There are no gender quotas in Russia

¹²⁹ Women CEOs in Russia. Financial performance indicators, Deloitte, 2020: <https://www2.deloitte.com/ru/en/pages/research-center/articles/women-ceo.html>

¹³⁰ Country score card Russia, p. 297, Global Gender Gap Report 2020

¹³¹ See appendix

¹³² https://www.e3s-conferences.org/articles/e3sconf/pdf/2020/24/e3sconf_tpacee20_11021.pdf

¹³³ https://www.unece.org/fileadmin/DAM/RCM_Website/Russian_Federation_English_.pdf

¹³⁴ Ibid.

¹³⁵ A summary of Russia's progress in gender policy at that time can be found here: <https://www.un.org/womenwatch/daw/Review/responses/RUSSIAN-FEDERATION-English.pdf>

¹³⁶ https://www.e3s-conferences.org/articles/e3sconf/pdf/2020/24/e3sconf_tpacee20_11021.pdf

¹³⁷ http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/CLT/pdf/RESOURCES_Informkultura_Russian_State_Library_Gender_Equ.pdf

¹³⁸ https://www.ela.law/Templates/media/files/Newsletter_Articles_Clients/2019%20Client%20Newsletter/November/EU/Russia_EL_A%20November%20Issue_Gender%20Equality.pdf

¹³⁹ Global Gender Gap Reports 2013–2020: <https://www.weforum.org/reports?utf8=%E2%9C%93&query=global+gender+gap+report>

¹⁴⁰ Global Gender Gap Report 2020, World Economic Forum, pp. 9 and 12

¹⁴¹ These particularly include: Concept for Demographic Policy of the Russian Federation up to 2025, National Children's Strategy 2012 to 2017 and Concept of the Family Policy of the Russian Federation up to 2025. See: https://www.unece.org/fileadmin/DAM/RCM_Website/Russian_Federation_English_.pdf

aimed at increasing the shares of women in management level positions.

There are regulatory/legal barriers in labour law, as in Ukraine and Kazakhstan. Statutory employment bans for professions generally deemed hazardous to the health and fertility of women¹⁴² block or obstruct women's access to the labour market for particular professions¹⁴³. Even though the government withdrew most of the occupational bans in 2019 (except for 100 of them), some major industries like mining and electrical engineering are exempted. The Labour Ministry Order came into force in January 2021.¹⁴⁴ As in Ukraine and Kazakhstan, employment bans in Russia lead to gender segregation of the labour market, with the consequence that "women's" and "men's" occupations are established. Women who aspire to a professional career in male-dominated sectors are on average more frequently exposed to gender stereotypes and prejudice.

Social framework conditions

Social commitment for women's rights and gender equality developed only after the Soviet era. In the 1990s numerous women's organisations were established at local, regional and national level. Probably the most influential women's organisation in the country is Women's Union of Russia (WU).¹⁴⁵ Established in 1990, it succeeded the Committee of Soviet Women as a public organisation.¹⁴⁶ The women's union is quasi-governmental, has regional and local sub-units (Women's Councils) and brings together women's councils, associations, committees and clubs, which operate on a voluntary basis. It is therefore active nationwide, aiming in particular to develop rural areas. Although the WU tends to pursue conservative goals¹⁴⁷, it has had a decisive influence on the development of the country's gender policy. The WU's programme supports women with the aid of consulting services and business management training for the development of entrepreneurial skills. However, the WU also ensures social infrastructure for women and supports women who rely on social welfare.¹⁴⁸ The WU's objective is to strengthen women's competitiveness in the labour

market in rural regions. In connection with the implementation of the national strategy for the advancement of woman, the WU is therefore involved in various activities in rural areas. This includes, for example, funding women's start-ups in the SME sector.¹⁴⁹

One influential and internationally highly recognised platform for discussion on the role of women in modern society is the Eurasian Women's Forum (EWF).¹⁵⁰ EWF pursues the objective of deepening international cooperation and developing collaborations among female management personnel. This is meant to enable women to participate in tackling socio-economic and humanitarian challenges and sustainable development. The forum promotes the empowerment of women and strengthens their role in politics and the economy. Participants in the forum are representatives from politics, the economy, science, public institutions and non-profit projects, as well as prominent female leaders from the international women's movement from many different countries. Since 2015 the forum has organised an international conference every three years, with over 1,000 participants from 80 countries. The last forum was held in 2018 in St. Petersburg and was opened by Russian President Vladimir Putin.¹⁵¹ Specific initiatives and projects are derived from meetings within the framework of the forum both in Russia and at an international level.¹⁵²

The founding idea for the forum is attributable to the Chair of the Federal Council of the Federal Assembly of the Russian Federation Valentina Matvienko. The forum is therefore also organised by the Russian Federal Council and the Interparliamentary Assembly of the Member States of the Commonwealth of Independent States (CIS).¹⁵³ The results of the forum are implemented by the Council of the Eurasian Women's Forum. It also implements the projects and programmes for the advancement of women derived from it.¹⁵⁴ At the international level the Council of the EWF encourages exchanging of experience and knowledge with female leaders and international organisations. At a national level it contributes to the implementation of the national strategy for the advancement of women. For that

¹⁴² <https://borgenproject.org/womens-rights-in-russia/>

¹⁴³ <http://www.pravo.gov.ru/proxy/ips/?docbody=&prevDoc=102095194&backlink=1&nd=102064692&rdk=0>

¹⁴⁴ <https://www.themoscowtimes.com/2019/08/16/russia-opens-350-banned-professions-to-women-stripping-soviet-era-restrictions-a66903>

¹⁴⁵ <https://wuor.ru/Page/1-womens-union-of-russia>

¹⁴⁶ Lakhova Ekaterina Filippovna has been the chair since 2006.

¹⁴⁷ The objectives include, among other things, improving the quality of life and social status of women in society, eliminating discrimination against women, humanisation of women, family and child policy and the creation of a strong, stable, morally healthy and thriving Russia.

¹⁴⁸ https://unece.org/fileadmin/DAM/RCM_Website/Russian_Federation_English_.pdf

¹⁴⁹ Ibid.

¹⁵⁰ <https://eawf.ru/en/about/agenda/>

¹⁵¹ <http://en.kremlin.ru/events/president/news/58598>

¹⁵² <https://roscongress.org/en/events/evraziyskiy-zhenskiy-forum-2018/> and <https://eawf.ru/en/projects/proekty-soveta-evraziyskogo-zhenskogo-foruma/>

¹⁵³ <https://eawf.ru/en/about/agenda>

¹⁵⁴ The Council of the Eurasian Women's Forum was founded by the Federal Council of the Federal Assembly of the Russian Federation.

INFOBOX DENA-INTERVIEW



Dr. Tatiana Mitrova

Dr. Tatiana Mitrova is one of the best known female Russian energy experts. She has over 20 years' experience of analysing energy markets and Russian energy policy. She is also well-acquainted with the subject of industrial organisation and regulatory issues and has cooperated with Russian and foreign energy companies and universities, Russian ministries and international organisations and think tanks. She obtained her doctorate in economic sciences on the subject of gas. Ms Mitrova is a co-founder of the women's network Women in Energy. She is the first woman on the Executive Board of Novatek, the largest private energy company Russia, which extracts natural gas. She currently works there as a non-managerial member of the management. She represents the interests of the shareholders and is therefore responsible for the long-term viability of the company. She assesses the corporate strategy according to the criteria of sustainability and drives the company forward with regard to diversifying its business model with green solutions. Tatiana Mitrova is also on the Executive Board of Schlumberger AG, the largest company in the world for crude oil exploration and oilfield services.

"I believe in progress and the energy transition. My mission is to promote the goal of a sustainable energy system and recruit as many people as possible for the green transition. I'm convinced that the energy transition is a matter of time. Every country will find its own way. Decarbonisation is the biggest driver of change and creates new business models and innovative ideas."

"The main factor for success is love, passion, inspiration and the pursuit of a worthwhile goal. The willingness to take the initiative is the second factor for success. The third guarantee of success is networks with different people, through which one can gain new perspectives and ideas. Women's networks strengthen personal development and encourage women to stay focused on their goals. In networks women find self-confidence and mutual support. To young women I say this: Dare to take risks if you believe passionately in an idea. The energy sector offers so many opportunities for professional development."

purpose the Council of the EWF implements state-financed projects, for example: Women in Digital Economy, STEM-Project, Development of Women's Entrepreneurship and Women for Sustainable Industrial Development. The latter is aimed at increasing the number of female students for STEM careers.¹⁵⁵ Other projects and initiatives supported by the Council of the EWF include: Stereotypes About Women and Their Economic Consequences, Mentoring School and Women Leader.¹⁵⁶ The commitment of the Eurasian community of women also gave rise to the Global Women Media news agency, an independent news agency¹⁵⁷. Through its website the agency raises the profile of female role models and with its stories attempts to break with traditional gender role assignments. The agency also provides practical assistance by providing information about important events and setting up a register concerning Russian women's organisations.¹⁵⁸

Women's networks

The most important women's network in Russia's energy sector is the initiative Women in Energy. Up to now the women's network has been loosely organised and communicates via social media¹⁵⁹, but aims to be institutionalised as a non-governmental organisation. The initiator and founder Dr. Tatiana Mitrova, a well-known energy expert from Russia, has already worked for several years on strengthening the role of women in the energy sector and their career prospects.¹⁶⁰ The women's network brings together women from the industry, promotes exchanging of experience and knowledge between them and raises their profile internationally and nationally. It is also a source of mutual support, expertise, inspiration and motivation. Tatiana Mitrova describes the network as a sort of sisterhood.¹⁶¹ The network enjoys great popularity in the professional environment, although the number of members is not known, and is supported by the Russian Ministry of Energy. The Secretary of State and Deputy Energy Minister Anastasia Bondarenko took part in the first official business meeting of the network in December 2019, to discuss the role of women in the energy sector and the pathways to discrimination-free access to technical professions. Subject areas and activities for joint cooperation were also identified. These include regularly held network meetings and the development of a position paper of all

¹⁵⁵ https://unece.org/fileadmin/DAM/RCM_Website/Russian_Federation_English_.pdf

¹⁵⁶ <http://eawfpress.ru/en/news/main/ewf/new-initiatives-of-the-council-of-the-urasian-women-s-forum/>

¹⁵⁷ Officially the agency is called "Global Women Media news agency". It was established by the Institute for Humanities and Information Technology, an independent non-profit organisation for higher education. The editor-in-chief is Marina Volynkina.

¹⁵⁸ Ibid.

¹⁵⁹ <https://www.facebook.com/womeninenergyrus/>

¹⁶⁰ <http://eawfpress.ru/en/news/expert/ecology/tatiana-mitrova-zhenshchiny-i-energiya/>

¹⁶¹ The information on the women's network Women in Energy is taken from an interview with the founder of the network Tatiana Mitrova held on 17 November 2020.

the women's associations in the industry in Russia. Women in Energy has also set itself the goal of creating an information platform with relevant information from Russian and international sources, collecting and analysing statistical data and reporting on the network's projects and activities.¹⁶² The platform is implemented via the website of the Russian National Committee by CIGRE.¹⁶³

CIGRE Women in Engineering (WiE)¹⁶⁴ is an international forum which supports the professional development of female engineers. It enables women to share their experiences and internationally network, since CIGRE is represented in 90 countries. WiE women's networks are installed in 20 countries, including Russia.¹⁶⁵ Their aim is to inspire more women to take an interest in engineering, support them in their professional career, permanently increase their participation in the power and energy industry and raise the profile of female role models.

Women On Boards Russia¹⁶⁶ is also an information portal, as well as a network and mentoring platform for women in management positions and executive board members.¹⁶⁷ Its mission is to network experienced female managers with talented young women hoping to follow in their footsteps and provide support for the latter in acquiring strategic management skills and preparing for management work. Women on Boards not only trains women – the network also assists and supports women in becoming successful managers. Mentoring, educational programmes, training courses and network meetings enable the transfer of management skills and provide advice for career planning. With its work Women on Boards would like to make a contribution to increasing the participation of women in management positions, for example on the executive boards of Russian companies. The network recently published a study concerning the role of women in the executive boards of the top 100 public companies in Russia.¹⁶⁸

Conclusion

Women account for just over half of the Russian population. Their participation in the labour market is almost equal to that of men. With a gender gap of 25 per cent in the dimension of the economic participation of women, Russia performs best compared to Ukraine,

Kazakhstan, Uzbekistan, Turkey and Iran. As a rule, women in Russia are well-educated and aspire to higher educational qualifications than men. The share of women among graduates from universities and polytechnics in STEM or energy-relevant subjects is not known, but as part of the national strategy for the advancement of women statistical surveys on the situation of women are to be improved. To what extent gender distribution in the area of tertiary education will be included remains to be seen.

At management levels the participation of women is very varied. In middle management they are well represented, but in higher management positions and at the top of company hierarchies they are underrepresented. The share of women also varies depending on company size and sector. Women are predominantly employed in the service sector and in retail. In the education, hospitality and health sectors they hold approximately as many management positions as men. In the energy sector women are underrepresented. The share of women in the renewable energy industry is probably a little higher. At the level of technical personnel women are overrepresented here. However, further up the hierarchical levels the share of women sharply decreases.

In 2017, with the National Strategy for the Advancement of Women, Russia created a comprehensive basis for equal participation of women in the political, economic, social and cultural areas of society. Nevertheless its political efforts are much less ambitious than those of Kazakhstan and Uzbekistan. It is not known how Russia's national strategy is to be implemented in the energy sector. In addition, traditional family values are still in the foreground of Russia's gender policy. While the framework conditions for reconciling motherhood and professional life are being improved, fatherhood is being neglected. Solutions that enable flexible forms of employment for both parents are also lacking. Following the closure of central institutions for gender equality after Vladimir Putin came into power in 2012, the gender gap in Russia grew, particularly in the political dimension, with the consequence that Russia fell back 30 places in the worldwide ranking.

One positive development is that as part of the National Strategy for the Advancement of Women a number of

¹⁶² Ibid.

¹⁶³ CIGRE, which stands for "Conseil International des Grands Réseaux Électriques" (Council for Large Electricity Networks), is a non-profit organisation and is considered the most important international technical and scientific organisation for exchanging of information in the area of high voltage technology. CIGRE's registered office is located in Paris. CIGRE has approx. 8,000 members from 90 countries worldwide and is supported at national level by national committees. The national committees

focus, among other things, on support for women in working and governing bodies. See: <http://www.cigre.ru/en/rnk/about/>

¹⁶⁴ <https://www.cigre.org/GB/community/women-in-energy>

¹⁶⁵ Olga Frolova is the Chair of CIGRE WiE of the Russian National Committee.

¹⁶⁶ https://womenonboards.ru/main_eng

¹⁶⁷ The network is currently run by Elena Rechkalova and Ekaterina Kravtsova.

¹⁶⁸ https://drive.google.com/file/d/14HD6qRg2bhy68xzj3_5Bei15KLeLNV6r/view

employment bans for women have been abolished, as in Ukraine and Kazakhstan. However, energy sector-relevant professions have not been affected by this and are still associated with male-dominated professions. Though the political frameworks include important steps in the direction of gender equality, no measures for raising awareness for equal opportunities for women and men are envisaged. It should be assumed that with the existing gender policy there will not be a break from the traditional role distribution between men and women and the labour market will remain segregated along gender lines.

Gender-specific stereotypes and prejudice are considered to be the biggest barriers for professional advancement by Russian women employed in the energy sector. The dena survey shows that in their opinion the solutions for overcoming inequalities primarily lie in changing the traditionally male-dominated working and corporate culture. The respondent female energy experts consider networks that support women's careers to be almost of equal importance. They consider the introduction of gender and inclusion policies and relevant measures in companies to be relevant for the purpose of improving gender diversity. Here too they feel that the legislator has some catching up to do. For example, with the

introduction of gender quotas it could significantly strengthen the participation of women in decision-making processes in politics and the economy. A greater number of female role models would also encourage women to develop professionally in male-dominated sectors.¹⁶⁹

Women's organisations and initiatives make an important contribution in Russia to the advancement of women. The most relevant players include the Eurasian Women's Forum and the women's network Women in Energy. While the Eurasian Women's Forum is state-financed, Women in Energy aspires to the status of non-governmental organisation. Women in Energy has been active since 2019 and has great potential to make a contribution to the improvement of career opportunities for women in the energy sector through civil society engagement.

Breaking with patriarchal structures would be of central importance for the achievement of gender equality in Russia. In order to increase the political and economic participation of women and permanently do away with gender discrimination, further efforts are required at the social, economic and legislative level.

¹⁶⁹ See appendix

Country profile – Uzbekistan

Although Uzbekistan does not participate in the Global Gender Gap Index, there are a number of alternative gender indices. In the Global Inequality Index (GII)¹⁷⁰ Uzbekistan ranked 64th in 2018 of the total of 162 countries around the world that were included.¹⁷¹ While Uzbekistan performs very well according to the GII in the dimensions of education and health and on average almost attains gender equality, there are major inequalities in the dimensions of the political and economic equality.

Labour market

The employment rate in Uzbekistan stood at almost 69 per cent in 2019.¹⁷² Of that almost 56 per cent of women fit to work¹⁷³ and almost 82 per cent of men fit to work¹⁷⁴ were in employment. In 2019 the country's total workforce consisted of 59 per cent male workers¹⁷⁵ and 41 per cent female workers¹⁷⁶. The service sector accounts for the largest share in the gross domestic product of Uzbekistan with 36.3 per cent, followed by the industrial sector with 28.5 per cent and agriculture, forestry management and fishing with 28.2 per cent.¹⁷⁷ Natural gas and oil production is the most significant component of Uzbekistan's energy sector (part of the industrial sector). Here Uzbekistan is ranked third compared to the members of the Commonwealth of Independent States (CIS).¹⁷⁸

In Uzbekistan the labour market is segregated along gender lines, as in many parts of Eastern Europe and Central Asia: women are mostly employed in rather

poorly paid professions in the education, health and social work sectors, while men are in the majority in technically oriented sectors, in which they earn relatively higher income.¹⁷⁹ According to the National Statistical Service, in 2019 women were significantly overrepresented in the health and social work sectors, with a share of 75.7 per cent. In the sectors of education, culture and art the share of women was also very high, at 76.8 per cent. By contrast, women were strongly underrepresented in the construction industry, with a share of 6.2 per cent. In the finance industry and the information and communications technologies sector, women account for approx. one third of employees. In the industrial sector women are much better represented, with a share of employment of 44 per cent.¹⁸⁰

Access to education is equally open to women and men, despite some differences in rural regions. 99.9 per cent of adult women and men have at least completed secondary

¹⁷⁰ The Gender Inequality Index (GII) is a social indicator for gender equality in the countries of the world and has been published each year since 2010 by the United Nations Development Programme (UNDP). The GII maps gender inequalities in the dimensions of health, empowerment and economic activity. In the dimension of empowerment, political participation and access to education are assessed. The Gender Inequality Index is interpreted as the loss of human development as a result of the inequalities between the genders. The lower the GII the less women are disadvantaged relative to men in the dimensions in question.

¹⁷¹ Human Development Report 2019. Inequalities in Human Development in the 21st Century. Briefing note for countries on the 2019 Human Development Report. Uzbekistan, UNDP: http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/UZB.pdf

¹⁷² <https://data.worldbank.org/indicator/SL.TLF.ACTI.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

¹⁷³ <https://data.worldbank.org/indicator/SL.TLF.ACTI.FE.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

¹⁷⁴ <https://data.worldbank.org/indicator/SL.TLF.ACTI.MA.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

¹⁷⁵ <https://gender.stat.uz/files/213/qJanuary-march-2018/845/January-march-2018.pdf?preview=1>. International data and economic analyses for Uzbekistan are also made available by the United States Agency for International Development (USAID):

<https://idea.usaid.gov/cd/uzbekistan/economy>

¹⁷⁶ <https://data.worldbank.org/indicator/SL.TLF.TOTL.FE.ZS?locations=UA-KZ-RU-UZ-IR-TR>

¹⁷⁷ <https://stat.uz/en/press-center/news-of-committee/7610-yalpi-ichki-mahsulotni-ishlab-chiqarish-2020-yil-yanvar-sentabr-3>

¹⁷⁸ [https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2020-full-](https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2020-full-report.pdf?utm_source=BP_Global_GroupCommunications_UK_external&utm_medium=email&utm_campaign=11599394_Statistical%20Review%202020%20-%20on%20the%20day%20reminder&dm_i=1PGC%2C6WM5E%2COV0LQ4%2CRQW75%2C1)

[report.pdf?utm_source=BP_Global_GroupCommunications_UK_external&utm_medium=email&utm_campaign=11599394_Statistical%20Review%202020%20-%20on%20the%20day%20reminder&dm_i=1PGC%2C6WM5E%2COV0LQ4%2CRQW75%2C1](https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2020-full-report.pdf?utm_source=BP_Global_GroupCommunications_UK_external&utm_medium=email&utm_campaign=11599394_Statistical%20Review%202020%20-%20on%20the%20day%20reminder&dm_i=1PGC%2C6WM5E%2COV0LQ4%2CRQW75%2C1)

¹⁷⁹ Uzbekistan Country Gender Assessment Update December 2018, p. 11

¹⁸⁰ <https://gender.stat.uz/files/209/qJanuary-march-2019/769/January-March-2019.pdf>

school.¹⁸¹ However, there are differences with regard to higher educational qualifications in the area of tertiary education. Of students who commenced their studies in 2019/2020, 38.3 per cent were women and 61.7 per cent men.¹⁸² Less women opt for studies in Uzbekistan than in Ukraine, Russia and Kazakhstan. Particularly in technically oriented subjects like engineering and construction or manufacturing, women are traditionally underrepresented, at less than 5 per cent.¹⁸³

The relatively low number of well-educated women is also reflected in management positions in industry and politics. Only 11 per cent of companies in Uzbekistan were run by women in 2019.¹⁸⁴ Almost 15 per cent of those companies were owned by women.¹⁸⁵ The United States Agency for International Development attributes the underrepresentation of female company founders to the fact that women have unequal access to seed capital and financial services compared to men. It is therefore more difficult for women to realise their own business ideas.¹⁸⁶ Women are underrepresented in leadership positions in politics too: In 2017, 16.4 per cent of members of parliament were women.¹⁸⁷ At the district level the share of women is higher, at 23 to 25 per cent. In the newly founded Ministry of Energy of Uzbekistan the share of women amounted to 14.5 per cent. However, only 1 per cent of positions in upper and middle management were held by women.¹⁸⁸

Particularly for the energy sector there are currently no data collections on sector-specific gender distribution. The Asian Development Bank (ADB) published figures from the period 2014 to 2017 in its study "Uzbekistan: Country Gender Assessment"¹⁸⁹ 2014 and 2018. The energy sector in Uzbekistan is predominantly state-owned and is managed by the state-owned energy corporation Uzbekenergo¹⁹⁰, as well as by several ministries. In order to identify gender inequalities in the energy sector, the ADB therefore examined Uzbekenergo's employment figures, broken down

according to gender and position. From 2014 to 2017 women accounted for an average of 17 per cent of all employees of the corporation. The ADB identified large differences in gender distribution in employment between urban and rural areas. While in the capital Tashkent more than 40 per cent of employees were women in 2014, their share in rural regions was only 10 to less than 30 per cent. Not a single woman was represented at the top management level of Uzbekenergo. The share of women in management positions in 2017 stood on average at around 23 per cent. While up to and including 2016 women were almost equally represented to men in technical personnel teams, the share of women decreased in 2017 to just under 13 per cent. The gender distribution is similar in service functions, for example installation maintenance. Here the share of employment of women compared to men stood at 15 per cent.¹⁹¹

The ADB study attributes the reasons for the underrepresentation of women in the energy sector, among other things, to inadequate educational and professional qualifications, a lack of knowledge about potential and available employment options, limited further training opportunities and prevailing stereotypes, as well as the social role of women in the family and society. Professions in the energy sector are traditionally perceived as being dangerous and therefore unsuitable for women. In addition, in career decisions women are generally less motivated by the prospects of success and employment than men. Rather, they aspire to obtain qualifications that have a positive effect on family life. In rural areas the barriers for women are higher, so they are less competitive in the labour market than women who live in towns/cities. Above all, they lack the necessary educational and professional qualifications, as well as appropriate skills.¹⁹² There is also a lack of national and sector-specific gender policies and a lack of support for women in male-dominated areas of education.¹⁹³

¹⁸¹ Uzbekistan Country Gender Assessment Update December 2018, Asian Development Bank, p. 67

¹⁸² <https://gender.stat.uz/files/239/qr2013/1032/January-march.pdf>

¹⁸³ Uzbekistan Country Gender Assessment Update December 2018, Asian Development Bank, p. 72

¹⁸⁴ <https://gender.stat.uz/en/>

¹⁸⁵ Ibid.

¹⁸⁶ <https://idea.usaid.gov/women-e3/uzbekistan>

¹⁸⁷ Uzbekistan Country Gender Assessment. Update. December 2018, Asian Development Bank (ADB), p. 10

¹⁸⁸ Ibid.

¹⁸⁹ The reports are available here:

<https://www.adb.org/sites/default/files/institutional-document/42767/files/uzbekistan-country-gender-assessment.pdf> and [<document/479841/uzbekistan-country-gender-assessment-update.pdf>](https://www.adb.org/sites/default/files/institutional-</p>
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¹⁹⁰ Uzbekenergo consists of 49 companies, including 36 joint stock companies, six unitary companies and eight limited liability companies. <https://www.devex.com/organizations/jsc-uzbekenergo-41564>

¹⁹¹ Uzbekistan Country Gender Assessment. Update. December 2018, Asian Development Bank (ADB), pp. 19–20. The interests of female employees are represented at Uzbekenergo particularly by women's committees of their own trade unions.

¹⁹² Uzbekistan Country Gender Assessment. Update. December 2018, Asian Development Bank (ADB), p. 11

¹⁹³ Uzbekistan Country Gender Assessment. Update. December 2018, Asian Development Bank, p. 72

The results of the dena survey of 2020 confirm that, among other things, a lack of skills and expertise is the largest barrier to Uzbek women achieving professional success in the energy sector. But not only a person's own educational background is decisive for a career in the energy sector. Participants see the lack of networks that specifically support women in the industry, as well as a lack of female role models, as a major obstacles. On part of companies the participants point to antiquated working cultures and corporate structures mainly dominated by men as further reasons for women being disadvantaged.¹⁹⁴

A current survey by the Asian Development Bank (ADB) among the employees of the Uzbek Energy Ministry from 2020 showed that male staff are barely aware of gender inequalities. As a rule, the employees have little understanding of gender issues, while women desire an open discussion on the issue of how gender equality can be achieved. They also desire a concept for the integration of equality of opportunity, as well as the necessary financial resources for the implementation of the planned measures, with the aim of reducing gender discrimination in their environment.¹⁹⁵

Political framework conditions

Uzbekistan has initiated a series of extensive reforms as part of its action strategy for the development of the country for the period 2017 to 2021, which relate to the public sector, the economy, the justice system and social life. The aim of the reforms is to strengthen the economic, political and social participation of women. In 2019 the Uzbek government enacted the country's first gender equality act. "The Law on Guarantees of Equal Rights and Opportunities for Women and Men" stands for the country's decisive stance against discrimination for reasons related to gender and secures equal rights for women and men – an ambitious goal aimed at breaking with traditional role expectations and gender stereotypes.¹⁹⁶ The act requires the integration of gender equality in all areas of life, for example in public administration, employee recruitment, the establishment

of companies and improvement of access to higher education, as well as with regard to the resolution of family disputes. In the same year the government repealed occupational bans for women in some industries, including in the oil and gas sector. It pursues the goal of making it easier for women to access male-dominated sectors and for companies to employ girls and women, extending their economic opportunities and developing their entrepreneurial activities.

With the establishment of the National Commission for Gender Equality in the Senate¹⁹⁷ and a new ministry, the Ministry for Support of the Mahalla and the Family of the Republic of Uzbekistan¹⁹⁸, the government set up the essential institutional framework for driving forward gender equality and developing an appropriate national strategy.¹⁹⁹ The hitherto most important national institution and the driving force in efforts to achieve equality, the Women's Committee of Uzbekistan (WCU) has been incorporated into the newly established institutions. WCU was a non-governmental organisation whose establishment was funded by the Uzbek government. The women's committee was active nationwide, was networked with every administrative authority and could operate in both built-up and rural areas. WCU worked closely with international organisations, for example the United Nations Development Programme (UNDP)²⁰⁰, UN Women²⁰¹ and the Asian Development Bank²⁰².

In the beginning of October 2020 the Uzbek Energy Ministry enacted a roadmap for the implementation of the national equality strategy,²⁰³ which includes a series of objectives: First, the ministry's personnel policy is changed, so that in the future gender relations will be taken into account. The introduction of specific measures is intended to ensure equal opportunities and help prevent gender-specific discrimination. The occurrence of instances of discrimination against women will thus be reduced, particularly in energy and infrastructure projects. Energy companies are required to develop their corporate culture accordingly.²⁰⁴

¹⁹⁴ See appendix

¹⁹⁵ Power Sector Reform Program. Gender Assessment July 2020, Asian Development Bank (ADB), pp. 18–21: <https://www.adb.org/sites/default/files/linked-documents/54269-001-sd-04.pdf>

¹⁹⁶ <https://www.usaid.gov/uzbekistan/program-updates/dec-2019-uzbekistan-passes-law-gender-equality>

¹⁹⁷ <https://www.gazeta.uz/ru/2019/07/31/women/>

¹⁹⁸ <http://www.uzdaily.com/en/post/54895>

¹⁹⁹ Power Sector Reform Program. Gender Assessment July 2020, Asian Development Bank (ADB), p. 13

²⁰⁰ <https://www.uz.undp.org/content/uzbekistan/en/home/presscenter/pressreleases/2017/11/20/wc-undp-will-promote-women-empowerment.html>

²⁰¹ <https://eca.unwomen.org/en/news/stories/2012/03/uzbek-womens-committee>

²⁰² The cooperation took place within the framework of these publications: "Women and Men in Uzbekistan 2007–2010: Statistical Bulletin", a statistical inventory of gender participation, and the series of studies "Uzbekistan. Country Gender Assessment" from the years 2005, 2014 and 2018, which elucidates the socio-economic aspects of gender equality / inequality.

²⁰³ <http://minenergy.uz/ru/news/view/854>

²⁰⁴ Ibid.

The recent developments in Uzbekistan indicate a clear strengthening of institutional gender policy in all areas of life. The measures for the implementation of the national equality strategy in the energy sector are a particularly positive development. The extent to which the planned reforms prove to be effective and bring about significant changes remains to be seen. Accompanying monitoring and continual statistical evaluation of the development of gender distribution in the energy sector, as well as in the area of tertiary education, would therefore be gratifying.

Social framework conditions

Civil society in Uzbekistan is predominantly characterised by so-called mahallas.²⁰⁵ Mahallas are self-managed bodies that traditionally play an important role in socio-economic development in communities. Nowadays the civil society landscape is more multi-faceted and includes, besides the traditional mahalla system, companies, basic democratic initiatives, government initiatives and political parties. Among the first civil society organisations that formed in the 1990s was the women's association Business Women Association of Uzbekistan (BWA) or Tadbirkor Ael. The association was the first women's organisation in Central Asia. The government supported the establishment of non-governmental organisations from the outset. Thus, in the area of the advancement of women, the Women's Committee of Uzbekistan (WCU) was established.

From the mid-1990s international organisations began to support the civil society initiatives in Uzbekistan. They include, for example, the United States Agency for International Development (USAID), the United Nations Development Programme (UNDP), the Konrad Adenauer Foundation, the Organisation for Security and Co-operation in Europe (OSCE) and later also the World Bank.²⁰⁶ The Asian Development Bank (ADB) is one of Uzbekistan's most important partners in funding sustainable development and gender equality.²⁰⁷ Active in Uzbekistan since 1995, the ADB financed, among other things, projects that facilitate access for girls and women to education and employment and make a contribution to closing the gender gap. The ADB worked closely with the Women's Committee of Uzbekistan (WCU) and published a series of studies on the socio-economic effects of Uzbekistan's transformation on gender equality. The ADB thus made an important contribution to greater transparency and improving the base of statistical data.

Most of the ADB's projects in the energy sector are oriented towards improving access to energy for consumers, increasing energy efficiency, modernising the energy supply, strengthening the technical capacity of energy production, optimising power distribution and promoting regional cooperation. Some of the projects include specific activities to promote equal opportunities for women and men. Since 2016 the ADB has pursued a gender policy for the energy sector in four relevant areas: the integration of gender equality into the sector-specific regulatory/legal framework, raising awareness of gender equality among employees of Uzbekenergo, the development of female leadership and reforming the educational system, with the aim of improving access to technical, energy-related universities for women. One of the ten measures of the gender policy involves the introduction of a 30% quota for women in management as well as a 40% quota for female employees as a whole.²⁰⁸

Civil society initiatives in specifically technical or energy-related areas are rare in Uzbekistan. The international mentoring and exchange programme TechWomen is an established programme of the U.S. Department of State's Bureau of Educational and Cultural Affairs (ECA)²⁰⁹, which is managed by the Institute of International Education (IIE)²¹⁰. TechWomen pursues the aim of supporting the next generation of female managers in STEM areas. TechWomen networks young women from Africa, Asia and the Middle East with women from the United States within the framework of a five-week programme in California, near Silicon Valley. The participants are given access to networks, resources and information and are supported in their professional development. Through the programme they often become role models for girls and women in their home countries and can pass on their knowledge. The participants remain in contact after the completion of the programme in that they participate in delegation trips and network meetings, for example within the framework of the Central Asia Women in Tech and Science Week in Tashkent, Uzbekistan²¹¹.

The non-profit non-governmental organisation (NGO) Tech4Impact²¹² founded in 2019 is one of the first civil society organisations which works for the advancement of girls and women in technically oriented areas within the framework of sustained development. Tech4Impact introduces girls to STEM subjects in a creative way, shows them career opportunities in technological areas and

²⁰⁵ <https://www.adb.org/sites/default/files/publication/29303/csb-uzb.pdf>

²⁰⁶ Ibid.

²⁰⁷ <https://www.adb.org/countries/uzbekistan/main>

²⁰⁸ Uzbekistan Country Gender Assessment. Update. December 2018, Asian Development Bank, p. 20

²⁰⁹ <https://eca.state.gov/about-bureau>

²¹⁰ <https://www.iie.org/>

²¹¹ <https://www.techwomen.org/uncategorized/uzbekistan-day-3-uniting-women-and-girls-in-science>

²¹² <http://tech4impact.uz/en/about/>

does pioneering work. Tech4Impact has set itself the goal of promoting innovation, green technologies, start-ups, young people and female company founders in Uzbekistan and Central Asia. One of the co-founders of the NGO is Saida Yusupova, a pioneer in the area of renewable energy sources. In 2016 she founded the consulting company Green Business Innovation²¹³, with which she implemented the first solar and wind farm projects in Uzbekistan, and was therefore one of the first people to open up the renewable energy market in Uzbekistan²¹⁴. Her professional and civil society commitment is geared towards the advancement of women and girls. Tech4Impact brings together various activities and various target groups.²¹⁵ They include, for example, Central Asia Week Women in Science and Technologies, with male and female representatives from Central Asia, Silicon Valley and Great Britain. Female experts are given visibility during the week and the opportunity to network and exchange ideas and experience. Green Business Innovation is also implementing the ClimateLaunchpad in Uzbekistan, an international competition for green business ideas. Uzbekistan participated in the competition for the first time in 2019. The competition Technovation Girls Uzbekistan²¹⁶ helps girls aged 10 to 18 to learn how they can solve social problems in their local communities using information technology.²¹⁷ Participants develop a project in teams relating to the objectives for sustainable development. The project Curiosity Maker Space provides a creative space for developing innovative ideas and solutions with design thinking methods. The Maker Space in Tashkent is supported by the US embassy.

Tech4Impact's work is in many respects exemplary. It is first Uzbek NGO that supports girls and women in STEM areas and at the same time raises their awareness of sustainable development goals. It not only addresses girls, but also involves parents. Tech4Impact strengthens girls' self-confidence, inspires them to take an interest in technical professions and encourages them to enter male-dominated working worlds. The NGO supports women in founding companies and taking on management positions. The NGO brings various stakeholders together, for example representatives of

conservative sectors with male and female entrepreneurs, and encourages them to exchange ideas and experiences and therefore set aside reservations, thus creating fertile ground for potential cooperation. There is great potential in initiatives like these for breaking down traditional gender-specific stereotypes and making a contribution to more equal opportunities.

Women's networks

In Uzbekistan 7 per cent of non-governmental organisations are women's associations.²¹⁸ Most of them were established in the 1990s.²¹⁹ The best known and oldest women's organisation in Uzbekistan is the Business Women Association (BWA) or Tadbirkor Ayol.²²⁰ Established in 1991, the BWA was the first women's organisation in Central Asia. With representative offices in 14 regions, 68 cities and districts the BWA is well networked throughout the country. The association cooperates closely with the Uzbek parliament and international organisations, for example the World Bank and the Delegation of the European Union in Uzbekistan. The BWA organises the annual international trade fair Businesswomenexpo. The association works to support and protect the economic and social rights of women in that it supports the entrepreneurial and social initiatives of women and facilitates their access to financial, educational and information resources. In the area of education the BWA focuses on the introduction of innovative educational programmes and retraining courses, with the aim of increasing women's qualifications and competitiveness. At an institutional level the BWA participates in strengthening the necessary frameworks for the economic and social participation of women. The BWA addresses gender inequalities which are typical for Uzbekistan and makes a significant contribution to closing gender gaps.²²¹

At the end of December 2020 a prominent group of female managers from the Central Asian states of Uzbekistan, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan set up a new platform.²²² Central Asian Women Leaders' Caucus is an informal network of female

²¹³ <http://gbi-consult.com/de/>

²¹⁴ Saida Yusupova implemented the first solar and wind power projects in Uzbekistan with Green Business Innovation. The company combines sustained development goals with green business models.

²¹⁵ <http://tech4impact.uz/en/category/programmes/>

²¹⁶ Videos on the competition can be found on YouTube: https://www.youtube.com/watch?v=6Bbwgl2gULQ&feature=emb_logo

²¹⁷ Further projects supported or implemented by Tech4Impact can be found on its own website: <http://tech4impact.uz/en/category/programmes/> or on partner

sites: <https://mentoringplatform.org/en/news/onlajjnseminar-dlja-mentorov-startapov>

²¹⁸ Uzbekistan Country Gender Assessment. Update. December 2018, Asian Development Bank, p. 6

²¹⁹ <https://www.adb.org/sites/default/files/publication/29303/csb-uzb.pdf>

²²⁰ <https://www.adju.uz/>. Gulnora Makhmudova is the current Chair of BWA.

²²¹ Ibid.

²²² <https://unrcca.unmissions.org/declaration-central-asia-women-leaders%E2%80%99-caucus>

INFOBOX DENA-INTERVIEW



Saida Yusupova

Saida Yusupova is the founder and managing director of Green Business Innovation, a consulting company for renewable energies, green technologies, innovations and women in the tech industry. She is also one of the co-founders of the non-profit non-governmental organisation Tech4Impact and gives seminars at the University of Uzbekistan, among other things on the business community in the renewable energy sector. She has been tech-savvy since childhood. Her father was an electrical engineer and her mother an engineer. Saida Yusupova studied international economy and sustainable development in Great Britain. She worked at the International Labour Organisation (ILO) and for the United Nations Development Programme (UNDP) in the areas of the environment and energy. After she took part in the mentoring programme of TechWomen in California, USA, she set up her own company in 2016.

“For me the biggest challenges when setting up a company were establishing the company’s reputation and expanding my network. Three years ago I established myself in the sector with Green Business Innovation. My role in the company as manager is to strengthen the team and the organisation. The basis for this is agile structures without hierarchies, cohesion, team spirit and delegation of duties. Only with a good team is it possible to overcome challenges and achieve the corporate targets. To support women as energy experts, mentoring programmes and training courses focusing on building social and communication skills are required. Collaborations between schools and companies, STEM classes and seminars on personality development are useful for providing support for girls and young women at an early stage.”

managers. The network is supported by the UN Regional Center for Preventive Diplomacy for Central Asia (UNRCCA) and UNDP Regional Bureau for Europe and the Commonwealth of Independent States and was announced within the framework of the Dialogue of Women Leaders from Central Asian States. The aim is to support women in the region in gaining a greater political, economic and social role and empowering them to participate more in the decision-making process in issues related to peace, stability and sustainable development in the region. The platform is intended to make a decisive contribution to further intensifying regional cooperation in Central Asia. The female representatives’ task is to drum up political support for sustainable development in the region in their home countries and act as a role model for the promotion of social transformation. Tanzila Narbaeva, spokesperson for the Parliament of Uzbekistan, has been appointed chair for 2021.²²³ So far there are no industry-specific women’s networks in the energy sector in Uzbekistan.

Conclusion

Women in Uzbekistan account for around 40 per cent the country’s total workforce. The share of women is therefore lower than in Ukraine, Russia and Kazakhstan. In Uzbekistan the labour market is segregated along gender lines, as in many parts of Eastern Europe and Central Asia. Most women work in badly paid professions in the service sector and they are very overrepresented in the areas of education, health and social work. In the industrial sector the gender distribution is shifting towards parity. Unlike in Ukraine, Russia and Kazakhstan, women are relatively less educated. They are not only strongly underrepresented compared to men in technically oriented subjects. Women also choose to enter higher education much less frequently than men. The low shares of women are also reflected at the management levels in industry and politics. In the energy sector there were also large differences in gender distribution in employment between urban and rural areas. It is conspicuous that the share of women in middle management positions was highest out of all hierarchical levels.

Probably the biggest obstacle for women in the energy sector is inadequate educational and professional qualifications. There is also a lack of knowledge about employment options and career opportunities in the energy sector. In rural areas educational and knowledge imbalances are even bigger than in the cities. Gender stereotypes and the traditional social role of women in

²²³<https://www.eurasia.undp.org/content/rbec/en/home/presscenter/pressreleases/2020/launch-of-the-first-women-leaders-dialogue-in-central-asia.html>

the family and society prevent equal access to professions in the energy sector, which are still perceived in society as male professions. The results of the dena survey confirm that the biggest lever for the reduction of gender inequalities in Uzbekistan is improved access to education. The Uzbek participants in the dena survey desire a transformation of the strongly male-dominated working culture, flat hierarchies and more family-friendly working conditions. They also see support by male colleagues and networks that promote women's careers, as well as coaching for personal development, as relevant solutions for overcoming barriers.²²⁴

In 2019 the Uzbek government put gender equality and the advancement of women on the political agenda as priority goals. Far-reaching reforms were initiated with the aim of strengthening the economic, political and social participation of women and gender equality was anchored more firmly institutionally. The adoption of an Act on Equal Rights and the establishment of a National Commission and a new ministry underline the relevance of the subject and the political will of the government to combat inequalities. In 2020 the Energy Ministry also enacted a roadmap for the implementation of the national equality strategy. It addresses both preventive measures against gender discrimination in energy and infrastructure projects and the personnel policy and corporate culture of energy companies. With the Asian Development Bank (ADB) the government and industry of Uzbekistan have a strong partner on their side. With its activities the ADB primarily addresses the gender gap in education and employment. For the energy sector it has developed an ambitious gender policy which aims to further develop the regulatory/legal framework, raise awareness of gender-related subjects, strengthen female leadership and reform the educational system. The ADB also promotes the introduction of gender quotas so as to

increase the share of women among employees as a whole and also at management levels in the energy sector.

The civil society landscape in Uzbekistan is multi-faceted. Women's networks have always played an important role in society. Upon its establishment in 1991, the Business Women Association (BWA) was the first women's organisation in all of Central Asia. As yet there is no energy sector-specific women's network in Uzbekistan. However, following the establishment of the non-profit non-governmental organisation Tech4Impact, for the first time there is an offering for girls and women that brings together sustainable development, green technologies and innovations in technically oriented areas with the business community. Tech4Impact has a broad offering which relies on both the promotion of young people and cooperation between different stakeholders, with the aim of shaping social transformation. The informal women's network Central Asian Women Leaders' Caucus recently set up by a group of female managers relies on transnational cooperation in the Central Asia region. Caucus has great potential to develop into a driving force for the implementation of sustainable development goals and the strengthening of the role of women in political, economic and social life at a regional level.

Uzbekistan is on the way to becoming an equal opportunities society. The engagement of women is exemplary and extends beyond national borders. What effect national reforms and civil society activities could have will only become clear in the coming years. Accompanying monitoring as well as continual collection of statistical data on gender distribution in education and employment could be helpful for the evaluation of the measures and for reviewing the equality strategy.

²²⁴ See appendix

Country profile – Turkey

With a gender gap of 36.5 per cent Turkey is at 130th place in the world ranking and therefore behind Ukraine, Russia, Kazakhstan and Uzbekistan but ahead of Iran.²²⁵ Turkey is 52.2 per cent short of economic equality for women and 87.6 per cent short of political equality. With regard to the economic participation of women, alongside Iran Turkey is at the bottom of the heap compared to the other countries examined in this study and lies far behind the regional average for Eastern Europe and Central Asia.²²⁶ With regard to the gender gap for political participation of women Turkey is the mid-range of the countries examined, behind Ukraine and Kazakhstan and the global average of 75 per cent, but ahead of Russia and Iran.

Labour market

The employment rate in Turkey was significantly lower compared to Ukraine and Russia, Kazakhstan and Uzbekistan in 2019, standing at 58 per cent.²²⁷ Almost 38 per cent of women fit for work²²⁸ and almost 78 per cent of men fit for work²²⁹ were in gainful employment. In 2019 the country's total workforce consisted of 33 per cent female workers and 67 per cent male workers.²³⁰ In Turkey women are best represented in the service sector, with a share of approx. 60 per cent. In that sector they primarily work in the areas of education, health and social work, retail, hospitality and catering. As a rule, women are in a minority in almost all economic activities, except for the areas of agriculture and finance, where rough gender equality prevails. Only in the health and social work sector are women overrepresented, at 68.5 per cent. Women are also in the majority of in the education sector, with a share of employment of 55 per cent.²³¹ In agriculture and forestry management and fishing 25 per cent of all female employees are economically active. In industry the figure is only 15 per cent and in the construction industry less than 1 per cent.²³²

A look at the management levels in politics and industry shows that women participate much less in decision-making processes than men and are significantly underrepresented: The share of women in positions in upper and middle management in companies stood at 17.3 per cent in 2018.²³³ In 2019 17.5 per cent of members of parliament were women, while 13.8 per cent of the supervisory board members of stock exchange-listed companies were women. Women are in the majority in almost 4 per cent of all companies. In equally few companies women hold positions at the top management level and therefore participate in strategic decision-making processes. Women are significantly better represented at the skilled worker and technical worker level, with a share of 40.1 per cent.²³⁴

Women in Turkey tend to be better educated than men. 53 per cent of university graduates were female in 2018/2019.²³⁵ The majority of female and male students gained a degree in the subjects of business administration, management and law. Here the share of women stood at 36.5 per cent and the share of men at 40 per cent. The shares of female and male students who gained a degree in practical university subjects are also

²²⁵ Country score card Turkey, Global Gender Gap Report 2020, World Economic Forum, p. 343

²²⁶ The gender gap amounts, as a regional average for the Eastern Europe and Central Asia region, to 27 per cent in the economic dimension and 85 per cent in the political dimension. The gender gap amounts, as a regional average for the Middle East and North Africa, to 57.5 per cent in the economic dimension and 90 per cent in the political dimension. Figure 8, Regional Performance 2020, Global Gender Gap Report 2020, World Economic Forum, p. 22

²²⁷ <https://data.worldbank.org/indicator/SL.TLF.ACTI.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

²²⁸ <https://data.worldbank.org/indicator/SL.TLF.ACTI.FE.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

²²⁹ <https://data.worldbank.org/indicator/SL.TLF.ACTI.MA.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

²³⁰ <https://data.worldbank.org/indicator/SL.TLF.TOTL.FE.ZS?locations=UA-KZ-RU-UZ-IR-TR>

²³¹ The data is based on surveys carried out by the Statistical Institute of Turkey (TUIK) and was made available to dena in English by the women's network Turkish Women in Renewable Energies (TWRE).

²³² Ibid.

²³³ https://www2.unwomen.org/-/media/field%20office%20eca/attachments/publications/2019/08/unwomen_strategicnotebrochureprint_compressed.pdf?la=en&vs=58

²³⁴ Country score card Turkey, Global Gender Gap Report 2020, World Economic Forum, p. 343 et seq.

²³⁵ <https://istatistik.yok.gov.tr/>

similar and in 2019 stood at approx. 25 per cent. It is noteworthy that in Turkey more female graduates attained an educational qualification in STEM subjects (14.2 per cent) than in the areas of art and humanities (13.7 per cent), education (13.5 per cent) and health (8.8 per cent), where they were overrepresented compared to men. Nevertheless, women with a degree in STEM subjects remain in the minority compared to men (26 per cent). Women are also underrepresented, in particular, in engineering: 7.4 per cent of female graduates successfully completed their studies in this area, compared to 19.4 per cent of male graduates.²³⁶

The Statistical Institute of Turkey Türkiye İstatistik Kurumu (TUIK) calculated the share of the energy sector in GDP for 2019 at 1.7 per cent. Relative to the previous year the energy sector grew by 12 per cent. With an average economic growth rate of 5 per cent over the last ten years, the energy sector has the highest growth rate in the entire Turkish economy and has great potential for employment.²³⁷ Up to now women in Turkey have participated relatively rarely in economic activities in the energy sector. In the area of the supply of electricity, gas, steam and air-conditioning systems, in 2019 11.3 per cent of the employees were women and 88.7 per cent were men. In the construction industry, women were even more underrepresented in the same year. Only 4.3 per cent of the employees were women in that sector, with a 95.7 per cent share of men.²³⁸

The study carried out by Deloitte in 2018 "Women in the energy industry"²³⁹ surveyed over 500 female employees on their role in the energy sector. The results of the survey show that a majority of the female employees are employed at lower hierarchical levels: 31 per cent of the respondents belong to the technical staff. The share of women in lower and middle management amounted to 20 per cent. Further up the hierarchical levels the share of women in the energy sector sharply decreases: women held 8 per cent of the positions in upper management and only 1 per cent of the positions within the management board.²⁴⁰ A majority of the women aspire to a management position: 67 per cent of the respondent women would like to advance to upper management. Women are predominantly employed in the departments of after-sales service (20 per cent), human resources, law, energy management, tariffs and legislation, as well as finance. Almost all the women are very well educated: 91 per cent of the respondents hold at least a bachelor's

university degree or a higher level degree. 29 per cent of the respondents have studied engineering, 20 per cent business administration and 8 per cent economic sciences.

However, the results of the Deloitte study also show that 73 per cent of the respondent women are generally pleased to be employed in the energy sector. The sector is attractive primarily due to learning, development and career opportunities, as well as the chance to work in a global industry. As negative aspects the respondents specified salary differences and a lack of benefits provided by the employer, disadvantages with regard to promotion and poor conditions in terms of reconciling professional and family life.²⁴¹ The respondents attributed the lack of women in management positions in the energy sector to the very much male-dominated corporate culture. Male managers tend to fill positions with male rather than female candidates. The management also fails to sufficiently promote the professional advancement of women. Thus 61 per cent of the respondents stated that their company has no strategy and has not implemented any measures for increasing the share of women among their employees.

The results of the dena survey confirm this impression. The Turkish participants most frequently specified gender prejudice and discrimination against women as barriers that obstruct women in embarking on a career in the energy sector or advancing professionally. Antiquated working cultures and corporate structures mainly dominated by men also obstruct gender-neutral career opportunities. A lack of gender and inclusion policies and measures derived from them on the part of employers, as well as non-family-friendly working conditions were also specified as barriers. The dena survey also showed that a lack of self-confidence and networks prevented women from advancing professionally. The Deloitte study calculated that 93 per cent of the respondent women are not organised into women's networks. The most powerful lever for attracting more women to the energy sector, according to the Deloitte study, is increasing the visibility of female managers who can act as role models for female employees.²⁴²

²³⁶ Country score card Turkey, Global Gender Gap Report 2020, World Economic Forum, p. 344

²³⁷ <https://data.tuik.gov.tr/Bulten/Index?p=Yillik-Gayrisafi-Yurt-Ici-Hasila-2019-33671>

²³⁸ The data is based on surveys carried out by the Statistical Institute of Turkey (TUIK) and was made available to dena in

English by the women's network Turkish Women in Renewable Energies (TWRE).

²³⁹ <https://www2.deloitte.com/tr/tr/pages/energy-and-resources/articles/enerji-sektorunde-kadin-2018.html>

²⁴⁰ Ibid.

²⁴¹ Ibid.

²⁴² See appendix

Political framework conditions

Since the 2000s Turkey has significantly improved the political frameworks for the elimination of all forms of discrimination against women and made progress in the elimination of gender inequality.²⁴³ In the Turkish constitution, in the Penal Code and Civil Code, in labour law and in the Act on the Protection of the Family and the Prevention of Violence against Women comprehensive regulations were issued in the period 2000 to 2016 to more strongly anchor gender equality institutionally. The regulations and legislative amendments relate to gender equality in marriage and the family, working life, the protection of women against abuse and violence as well as early and forced marriages, the empowerment of women and the acquisition of property and inheritances by women.²⁴⁴ Turkey was the first country to sign and ratify the Istanbul Convention on Preventing and Combating Violence against Women and Domestic Violence²⁴⁵ in the years 2011 and 2012. Turkey thus enacted important legislative changes, primarily for the protection of women against violence and heteronomy.²⁴⁶

The legal framework was implemented with the aid of the National Action Plan for Gender Equality (2008 to 2013) and the National Action Plan for Combating Violence against Women (2016 to 2020). The national employment strategy (2014 to 2023) pursues the overarching aim of reducing unemployment in agriculture and increasing labour force participation up to 2023 with a holistic approach, including equal opportunities, employee protection, social dialogue and a system of incentives.²⁴⁷ The strategy mainly focuses on employment in connection with education and social security, guaranteeing security and flexibility in the labour market and increasing employment of endangered groups. For example the employment rate for women is to be increased by breaking down cultural barriers in connection with the employment of women. Vocational training is to be improved in order to strengthen fundamental skills and competencies for independence, including for girls. Low-income women will be supported with microcredits when setting up companies. The action

plan for the implementation of the national strategy for the period from 2017 to 2019 targeted the sectors of information technology, finance, construction, health, agriculture, textiles and tourism.²⁴⁸ The energy sector was not included.

In the years 2015 and 2016 employment regulations in favour of women on maternity leave and parental leave were introduced. However, fathers were not taken into account.²⁴⁹

The most important institution for gender equality in Turkey is the Committee on Equality and Opportunity for Women and Men of the Grand National Assembly of Turkey.²⁵⁰ The committee is an authorised body of the Turkish Parliament and is responsible for the protection and strengthening of women's rights as well as the promotion of equality between women and men. Members are both members of parliament and independent representatives (both male and female). Most members are female members of parliament. With the establishment of the committee in 2009 an institutional gap in the promotion of gender equality and anti-discrimination was closed. The committee issues statements on draft laws if they relate to violence against women or children, women's shelters, maternity leave, women's rights, the marriageable age or harassment. It issues and publishes reports on its work and current challenges in connection with gender inequalities. It accepts petitions from both male and female citizens with regard to violations of gender equality or gender discrimination and assesses them.²⁵¹ Its activities also include raising awareness for gender issues and local, national and international meetings, panels and symposiums. Temporary issue-specific subcommittees²⁵² can be formed. They can request information from public administrations and commission public institutions, universities, civil society organisations and professional associations to carry out studies. External experts (male or female) can be included in the subcommittees. The committee cooperates with international organisations, public institutions and civil society organisations and holds various dialogue events, with the aim of raising awareness of issues of gender equality in society and

²⁴³ http://www.surdurulebilirkalkinma.gov.tr/wp-content/uploads/2020/03/Surdurulebilir-Kalkinma-Amaclari-Degerlendirme-Raporu_13_12_2019-WEB.pdf

²⁴⁴ Ibid.

²⁴⁵ <https://www.coe.int/en/web/istanbul-convention/about-the-convention>

²⁴⁶ <https://eca.unwomen.org/en/where-we-are/turkey>

²⁴⁷ <https://leap.informea.org/countries/tr/national-legislation/national-employment-strategy-2014-2023-action-plan-2014-2016>

²⁴⁸ <https://www.morogluarseven.com/news-and-publications/turkey-approves-2017-2019-action-plan-support-national-employment-strategy/>

²⁴⁹ http://www.surdurulebilirkalkinma.gov.tr/wp-content/uploads/2020/03/Surdurulebilir-Kalkinma-Amaclari-Degerlendirme-Raporu_13_12_2019-WEB.pdf

²⁵⁰ <https://global.tbmm.gov.tr/index.php/EN/yd/icerik/101>

²⁵¹ Most of the petitions relate to violence against women, sexual abuse, suicide by women, murders of women or gender discrimination with regard to promotion in public organisations. See *ibid.*

²⁵² For example there were subcommittees on the following subjects: the role of gender equality in the education system, employment of women and gender-sensitive budgeting.

parliament.²⁵³ The biggest project is the Joint Program on Fostering an Enabling Environment for Gender Equality in Turkey, which has been implemented over a period of two years in cooperation with UN Women and the United Nations Development Programme and with the involvement of civil society. The aim was to anchor gender equality in legislative processes and policy-making and regularly monitor and evaluate it.

Social framework conditions

Civil society in Turkey grew in strength and continued to develop only from the 1980s, after the end of the military junta.²⁵⁴ In the period 1983 to 2004 the number of autonomously operating civil society organisations tripled. In that period some of the most important of them were established, for example the Human Rights Association, the Human Rights Foundation, the Mesopotamia Cultural Center and KA-DER, a group founded at the end of the 1990s in the area of the advancement of women.²⁵⁵ KA-DER campaigns for an increase in the number of women in politics and decision-making positions, in order to achieve equal representation of the two genders.²⁵⁶

At an international level Turkey is supported in its gender policy by United Nations Women (UN Women). This international non-governmental organisation of the United Nations has been active in Turkey since 2012 and works closely with the government and civil society. UN Women Turkey²⁵⁷ focuses on initiatives in the areas of leadership and political participation, the prevention of violence against women and girls, peace, security and humanitarian action, national budgeting and coordination of the work of the UN system.²⁵⁸ In order to increase the number of female management personnel and the participation of women in organisations and companies, UN Women campaigns for signatures on the Women's Empowerment Principles (WEPs). Together with the UN

Global Compact²⁵⁹ Turkey Working Group on Women's Empowerment, UN Women developed guidelines for the implementation of the WEPs in Turkey.²⁶⁰ The guidelines provide assistance and guidance to institutions and organisations in various sectors. Turkey ranks second in the world in terms of the number of WEPs signatories.²⁶¹ However, energy companies are not yet among them.²⁶²

Initiatives and projects with a technical focus have arisen in the last five years in the area of education. The project Girls in STEM (GIS) specifically supports schoolgirls. GIS was set up in 2016 as an international MINT project between Turkey, South Korea, China and the USA.²⁶³ GIS is supported by the US Institute of Technology, Economics and Diplomacy (INTED).²⁶⁴ GIS aims to arouse girls' curiosity for STEM subjects at an early age and draw their attention to professional prospects in technically oriented areas. GIS would thus like to increase awareness and understanding for global education, science and cultural exchange.²⁶⁵

Within the framework of the project Girls Can STEM, Space Camp Turkey in cooperation with the Flying Broom Women's Communication and Research Association (WCRA) and the US embassy in Ankara implemented an Outer Space Adventure Program for schoolgirls. 15 schoolgirls from 15 cities were thus able to participate in a training course on space technology. With its activities the WCRA aims to introduce girls to science, technology, engineering and mathematics.²⁶⁶

A series of projects for the advancement of women is being implemented within the framework of Turkey's national employment strategy. Women-Up is a current project intended to specifically promote the employment and employability of women and female entrepreneurs in the period 2020 to 2023.²⁶⁷ The project provides grants for female employees employed by businesswomen in selected provinces. Microentrepreneurs receive wage cost rebates for each additional woman that they employ.

²⁵³ Past events include: Seminar on Empowerment of Women's NGOs on Participating in the Legislation Process, Education on Gender Mainstreaming to Legislative Experts of the Grand National Assembly of Turkey, International Gender Equality Meeting on the Role of the Gender Commissions for a More Equal World.

²⁵⁴ <https://www.americanprogress.org/issues/security/reports/2017/07/10/435475/trends-turkish-civil-society/>

²⁵⁵ Ibid.

²⁵⁶ <http://ka-der.org.tr/>

²⁵⁷ https://www2.unwomen.org/-/media/field%20office%20eca/attachments/publications/2019/08/unwomen_strategicnotebrochureprint_compressed.pdf?la=en&vs=58

²⁵⁸ <https://eca.unwomen.org/en/where-we-are/turkey>

²⁵⁹ United Nations Global Compact (UN Global Compact) is the world's largest and most important initiative for responsible business management. It supports organisations and companies

which subscribe to the notions of sustainability and responsible business practices. See: <https://www.unglobalcompact.org/>

²⁶⁰ <https://eca.unwomen.org/en/digital-library/publications/2017/01/weps-implementation-guide>

²⁶¹ <https://eca.unwomen.org/en/where-we-are/turkey>

²⁶² <https://www.unglobalcompact.org/engage-locally/europe/turkey>

²⁶³ <https://www.gisproject.org/about>

²⁶⁴ <https://www.inted.org/about>

²⁶⁵ According to the website the activities under the GIS programme took place each year up to and including 2018.

²⁶⁶ <https://www.spacecampturkey.com/girls-can-stem-explore-space>

²⁶⁷ <http://www.ikg.gov.tr/operation-on-supporting-registered-women-employment-women-up/?lang=en>

With the project, 4,000 businesswomen will be funded and 4,000 new jobs will be created.²⁶⁸

Companies founded by women can receive financial benefits from the state-financed Small and Medium Enterprises Development Organization of Turkey (KOSGEB). KOSGEB supports businesswomen mainly in the agricultural sector.²⁶⁹

Programmes that specifically or exclusively work towards gender equality and the advancement of women in the energy sector are very rare or invisible. Funding mechanisms tend to be aimed at general technical / engineering skills building. The Limak Foundation for Education, Culture and Health²⁷⁰ developed a project in 2015 for the support of schoolgirls in the area of engineering. Engineer Girls of Turkey (EGT)²⁷¹ has been implemented and financed since 2016 in cooperation with the Turkish Ministry for Family and Social Policy and the United Nations Development Programme (UNDP). The foundation was established by Limak Holding within the framework of its corporate responsibility strategy. Limak is a corporate group that brings together several business entities from different industries. Limak is economically active in the construction industry, tourism, aviation, the food industry and the cement industry, as well as in the energy sector. In the energy sector Limak is represented by two subsidiaries. Elmak Energy Contracting provides project and contracting services²⁷², while Limak Energy Group²⁷³ operates in the areas of energy production, distribution, sales and trading. The activities of Engineer Girls of Turkey (EGT) are aimed on the one hand at pupils in secondary school and on the other at female students. Within the framework of various events EGT provides information about engineering professions to schoolgirls in grammar schools, with the aim of inspiring them to take an interest in engineering so that they take it into consideration when choosing a profession. Girls who have commenced studies in engineering and need financial support are funded by EGT throughout their period of education. The range of benefits on offer includes, besides scholarships, internships at Limak or its subsidiaries, mentoring programmes, coaching and English language courses, as well as the possibility of employment with Limak or its subsidiaries if a particular person is suitable.²⁷⁴ The

mentoring programme is carried out by female engineers from Limak on a voluntary basis. The mentors and mentees are trained by technical experts, both male and female, with a practical background and share knowledge and experience through a network. According to its own data, with its activities EGT reached 20,000 female students from 10 cities. Each year approx. 100 female students benefit from the scholarships and mentoring programmes.²⁷⁵ The project is deemed a model for the advancement of young women in engineering, including beyond Turkey's national borders.²⁷⁶ With the development of innovative programmes like EGT that aim to develop young female engineers and future female leaders, Turkey plays a pioneering role.²⁷⁷

Women's networks

The first and thus far only women's network in Turkey's energy sector is Turkish Women of Renewable Energy and Energy Sector (TWRE).²⁷⁸ The network was established in 2018 with the aim of creating a professional network for women who work or want to work in the energy sector, particularly in the area of renewable energy. TWRE's mission is to positively influence the perception of women in the energy sector, raise the profile of female energy experts and strengthen women's interest in the energy sector. It is important to TWRE that the energy sector gain more female experts for green technologies and renewable energy. With its work TWRE would like to make a contribution to gender equality in business life and increase the share of women in employment in the energy sector. The women's network began as a closed LinkedIn group with 100 members from the wind industry. It now has 1,400 members from all the energy industries. They include female management personnel, academics, university graduates and students from different disciplines and areas of engineering.

TWRE is convinced that it is extremely important for women's careers that women in the industry know each other, support each other and act as role models for one another. TWRE founder Sedef Budak confirmed in an interview with dena²⁷⁹ the effectiveness of the women's network as a women's lobby. Members of TWRE have received job offers due to the visibility they have obtained in the network and due to TWRE's reputation as a civil

²⁶⁸ Ibid.

²⁶⁹ <https://www.kosgebkredi.net/kadin-girisimcilere-50-bin-tl-hibe-devlet-destekli-kredi/>

²⁷⁰ <http://www.limak.com.tr/social-responsibility/limak-foundation>

²⁷¹ <http://www.limak.com.tr/social-responsibility/limak-foundation/engineer-girls-of-turkey> and <http://limakscopje.com/social-responsibility/limak-foundation/engineer-girls-of-turkey.html>

²⁷² <http://www.limak.com.tr/sectors/energy-contracting>

²⁷³ <http://www.limak.com.tr/sectors/energy>

²⁷⁴ <http://www.limak.com.tr/social-responsibility/limak-foundation/engineer-girls-of-turkey>

²⁷⁵ Ibid.

²⁷⁶ <https://emerging-europe.com/voices/turkish-women-engineering-a-better-world/>

²⁷⁷ Ibid.

²⁷⁸ <https://twre.org/about>

²⁷⁹ The interview with Sedef Budak was conducted on 18 November 2020.

INFOBOX DENA-INTERVIEW



Sedef Budak

Sedef Budak is the founder and chair of TWRE, the first women's network in the Turkish energy sector. She is one of the few Turkish businesswomen in the industry, an independent investment consultant for wind and solar energy and national spokesperson for Vector Cuatro Group, where she is responsible for Green Investments. She has worked in the industry since 2007 and is a part of the energy transition in Turkey. During her studies, Sedef Budak was an enthusiastic paraglider and has 20 years' of experience in aviation.

She came to the energy sector via a circuitous route. After obtaining a university degree in hotel management she initially worked in the textiles industry with different international companies. In her professional development she was strongly influenced by a visit to the first Turkish wind farm. From then on she was fascinated with wind turbines and renewable energy, even though she did not have a relevant educational background. With the aid of her father and mentor, she set up her own company and was soon well-known as "the girl who sells Chinese turbines". She acquired essential engineering knowledge through self-teaching. She took her father along to her first business meetings with potential Chinese partners, because she was not taken seriously as a young female entrepreneur. She is now a respected businesswoman in the industry and shares her experience and knowledge with other women from the energy sector.

"In the energy sector no one thinks there's any need to support women's networks, because all the decision-makers in upper management are men. Jobs in the industry tend to be given to men rather than women even if they have the same qualifications. The mindset of managers in some companies is changing, but slowly. TWRE is therefore called in by large corporations to provide advice. Men must be taught to work with women and break down their prejudice. Men are scared of losing their job to a woman and are therefore less likely to be cooperative and share their knowledge. There are no sector-specific mechanisms in Turkey for increasing the employment of women. It's female civil society organisations that create the solutions, secure the financing and support businesswomen. It is therefore important to strengthen women's networks and lever women into key positions."

society player. Large corporations also approach TWRE in order to recruit female experts. The network's numerous activities include, besides regular network events and the organisation of conventions and trade fairs, various training courses, mentoring programmes, career advice, the provision of advice to human resources departments of private companies, brokering internships and the development of sustainable projects in cooperation with national and international organisations from the energy sector.²⁸⁰ With Nordex, the market leader in Turkey's wind power industry, TWRE has developed a programme which offers talented young women internships followed by employment if they are suitable.²⁸¹ TWRE also works with international women's networks, for example Global Women's Network for the Energy Transition (GWNET).²⁸² The first funding instrument focusing on the wind energy industry was created in 2018/2019. Women in Wind Global Leadership Program²⁸³ is an initiative of the Global Wind Energy Council (GWEC)²⁸⁴ and GWNET²⁸⁵ that was first implemented in 2019. The leadership programme was developed in order to further women's careers in the wind industry, support their promotion to management positions and create a global network for mentoring, exchanging of knowledge and empowerment.²⁸⁶ The leadership programme is supported by the Turkish Wind Energy Association (TWEA) / TUREB²⁸⁷ in its capacity as a Global Ambassador²⁸⁸. TWEA was established in 1992 and is a member of Wind Europe and the Global Wind Energy Council (GWEC).

In 2019 the association Women Tech (Wtech) was established in order to cover the demand for technical personnel in technically oriented areas and support technical education at university level and in employment.²⁸⁹ With the Wtech Academy the women's association developed technology-specific training courses in cooperation with other non-governmental organisations and companies. The content of the courses relates to typical STEM subjects. The academy is supported by various universities in Turkey.²⁹⁰ The partner companies of Wtech Academy include the energy company EnerjiSa, an offshoot of E.ON, Siemens and other companies from various sectors.²⁹¹ With the aid of a mentoring pool mentees are individually matched with

²⁸⁰ <https://twre.org/our-projects>

²⁸¹ This information is taken from the interview with TWRE founder Sedef Budak.

²⁸² Ibid.

²⁸³ <https://gwec.net/women-in-wind/about-the-program/>

²⁸⁴ The Global Wind Energy Council (GWEC) is the international industrial association of the wind energy industry. See: <https://gwec.net/>

²⁸⁵ Global Women's Network for the Energy Transition (GWNET) is an international women's network that supports women from every part of the world working in the area of sustainable

energy. GWNET is an international non-profit organisation and was established in 2017. See: <https://www.globalwomennet.org/>

²⁸⁶ Ibid.

²⁸⁷ <https://tureb.com.tr/eng/kurumsal/hakkimizda/2>

²⁸⁸ <https://gwec.net/global-ambassadors/>

²⁸⁹ https://www.teknolojidekadin.org/index.php?page=blog/blog&blog_id=1

²⁹⁰ https://www.teknolojidekadin.org/index.php?page=blog/blog&blog_id=2

²⁹¹ <https://www.teknolojidekadin.org/index.php?page=blog/kurumsal>

appropriate female mentors in order to strengthen them in their skills development. Wtech makes its network available and brokers jobs in sustainable technologies, and therefore supports women in embarking on and developing a career.²⁹²

The Turkish Business Association (TIKAD)²⁹³ was established in 2004 and has established itself as a powerful civil society player in the political and economic environment. TIKAD campaigns to increase the political, economic and social participation of women and businesswomen. Its main objective is to increase the share of women in parliament in order to balance out the underrepresentation of women.²⁹⁴ The TIKAD would thus like to increase the influence of women and businesswomen on public opinion and the government, involve them in decision-making processes and help to ensure that women take on responsibility in Turkey's democratisation process and international cooperation. With its activities TIKAD encourages collaboration and cooperation among its members and cooperation partners. It provides its members with information on innovations and supports them with technical and financial services, so as to implement business ideas of women and businesswomen. TIKAD organises national and international conferences and panels, but also social activities and campaigns.²⁹⁵ The association is well networked and works with local and foreign private and national organisations, as well as with chambers of industry and commerce, associations, foundations and trade unions.²⁹⁶

Conclusion

In Turkey twice as many men are in gainful employment as women, even though half of all university graduates are female. Like in the other countries examined, women in gainful employment in Turkey are predominantly employed in the service sector. With the exception of the areas of education, health and social work, as well as state-funded agriculture, women are in the minority in all other sectors. Government funding mechanisms, development programmes and initiatives support predominantly local companies, with the aim of developing rural areas and combating unemployment. But there are no specific instruments for the employment of women in the major industries. Compared to Uzbekistan and Kazakhstan women are more underrepresented in industry and construction. They hardly participate at all in political and economic decision-making processes and therefore cannot play a role in

determining the direction in which Turkey politically and economically develops. At management levels in politics and industry, including the energy sector, women are on average one fifth represented at the most. Top positions are almost exclusively held by men.

The Deloitte study shows that women want to advance professionally and take on management responsibility. Based on their educational background the women working in the energy sector would be sufficiently qualified. They are mainly employed as skilled and technical workers. Both the Deloitte study and dena's inquiries as part of an online survey have shown that the largest barrier to women pursuing a career in Turkey's energy sector is the male-dominated corporate culture. Gender prejudice with respect to women and their suitability as management personnel in upper management is seen as a major obstacle for professional advancement. Women feel they are at a disadvantage compared to male colleagues when it comes to promotions.

Decisive legislative changes for equal opportunities for women and men have been carried out since 2000. Most importantly, Turkey has strengthened the institutional framework for the protection of women and girls against violence. Besides the prevention of violence, the focus of gender policy is on combating unemployment and increasing the number of women in employment. Industry and therefore also the energy sector have thus far not been taken into account in the government's action plans. For example, funding programmes have been set up for the agricultural sector. Here the state supports women in founding microcompanies. With the establishment of the Committee on Equality and Opportunity for Women and Men of the Grand National Assembly of Turkey in 2009 an important institution was created that both protects the basic right of gender equality and at the same time drives it forward as an independent body. Citizens of both gender can directly contact the committee in the event of a violation of the principles of equality. However, the committee can also put topics on the agenda itself and form its own subcommittees for that purpose, as well as bring in experts from civil society or academia. An initial project aimed at anchoring gender equality in legislative processes and the political process has been implemented in cooperation with bodies of the United Nations and is considered a model project in view of the dovetailing of legislative and executive.

²⁹² <https://www.teknolojidekadin.org/>

²⁹³ <http://www.tikad.org.tr/home.html>

²⁹⁴ <https://www.hurriyetdailynews.com/women-should-make-up-50-percent-of-decision-making-positions-turkish-businesswomens-association-head-132255>

²⁹⁵ You can find an overview on TIKAD's activities in 2000 here:

<http://www.tikad.org.tr/activities/year2020.html>

²⁹⁶ <http://www.tikad.org.tr/constitution.html>

Civil society players play a major role in Turkey. Women's organisations are active primarily in the area of promoting political, economic and social participation. Furthermore, in the last five years initiatives and projects have been set up in the area of education for the advancement of girls and female students in STEM subjects and engineering. They pursue the goal of involving more women in technically oriented professions, in which they are very underrepresented. The demand for technical workers is thereby covered at the same time as employment in future markets is increased. An excellent example is the Engineer Girls of Turkey of the Limak foundation. Young women are supported during their studies, brought together with female mentors and actively supported when starting a career. For that purpose the Limak Group, which operates in the energy sector among other things, makes its extensive network available and brokers internships and jobs. The engagement of TWRE, the first women's network in the energy sector, is also outstanding. Since its establishment in 2018, TWRE has become respected in the industry as a civil society player which is primarily active in the renewable energy industry and helps to shape the energy transition in Turkey. TWRE makes a contribution to the funding of women's careers in the male-dominated energy sector, is effective as a women's lobby and promotes the employment of women through

collaborations with companies, competence building and exchanging of experiences. TWRE raises the profile of female role models, which is of central importance for recruiting further women for the industry.

The results of the dena survey and the Deloitte study thus both show that the energy sector needs more female role models and the visibility of female management personnel must be increased to overcome existing barriers. The Turkish participants in the dena survey see a powerful lever for increasing the share of women in the sector in the introduction of gender and inclusion policies by the government, for example in the form of gender quotas, as well as by companies. In the professional world, the working and corporate culture are decisive for women. As long as it is exclusively male-dominated and family-friendly working conditions are lacking, women will continue to be at a disadvantage compared to men. Here too the results of the Deloitte study correspond to those of the dena survey: The energy sector needs networks that support women's careers, network women in the industry, support their exchange of knowledge and experience and implement mentoring, coaching and development programmes for women, with the aim of training new female managers.²⁹⁷

²⁹⁷ See appendix

Country profile – Iran

With an average gender gap of 41.6 per cent Iran ranks one of the lowest in the world, far behind Ukraine, Russia, Kazakhstan, Uzbekistan and Turkey.²⁹⁸ Iran is still 61.9 per cent short of economic equality for women and as much as 96.3 per cent short of political equality. Women are largely excluded from political participation in Iran and only participate in economic activities to a limited extent. The level of gender inequality in Iran is among the highest compared to the worldwide average and regional average for Eastern Europe and Central Asia.²⁹⁹

Labour market

The employment rate in Iran in 2019 was by far the lowest compared to Ukraine and Russia, Kazakhstan, Uzbekistan and Turkey, standing at 47.6 per cent.³⁰⁰ Thus a little less than half of those fit to work were in gainful employment. The employment rate for men fit for work stood at 76 per cent and was below the average for all the countries examined in this study, but still ahead of Ukraine.³⁰¹ Women participated in gainful employment to a much lesser extent than men: 18.9 per cent of women fit for work at the age of between 15 and 64 were in gainful employment.³⁰² In 2019 the country's total workforce consisted of 19.5 per cent female workers and 80.5 per cent male workers.³⁰³

According to the official Iranian workforce statistics, women in Iran are mainly employed in the service sector. 50.8 per cent of female workers were employed in that sector in 2019. The share of male employees in the service sector is approximately equal.³⁰⁴ In Iran, industry is the second most important sector in terms of employment. 30.4 per cent of women in employment and 33.4 per cent of men in employment are working in that sector. The agricultural sector is the third largest employer sector. On average 17.1 per cent of all workers are employed in it. In 2019 18.8 per cent of female employees were employed in the agricultural sector and

16.8 per cent of male employees.³⁰⁵ Although the absolute number of working men in all three sectors is higher than the number of working women, the relative gender distribution in employment across all three sectors is equal. That means that the share of women and men in sector-specific employment is equal to the share of women and men in all gainful employment. Data on the employment of women and men in the subsectors is not available, so no statement can be made on gender distribution in the energy sector.

The significance of economic sectors is also illustrated by their share in gross domestic product (GDP). According to the Iranian Central Bank, in 2019 the service sector contributed a share of 57.1 per cent of Iran's total economic output. At 25 per cent of GDP industry³⁰⁶ and mining ranked second, while agriculture ranked third at 12.5 per cent. The oil sector contributed 7.4 per cent of GDP in the same year, around half the figure for the previous year.³⁰⁷ The energy supply in Iran is mainly state-owned. The oil industry is state-run. According to information from the Iranian Energy Ministry, Iran generates almost 1 per cent of its electricity from renewable energy sources, including solar, wind, small-scale hydroelectric power, waste heat and biomass. Renewable power plants have created 43,450 jobs

²⁹⁸ Of the 153 countries around the world examined Iran ranks 148th. See: Country score card Iran, Global Gender Gap Report 2020, World Economic Forum, p. 189

²⁹⁹ The gender gap for the Eastern Europe and Central Asia region amounts on average to 27 per cent in the economic dimension and 85 per cent in the political dimension. The gender gap amounts, as a regional average for the Middle East and North Africa, to 57.5 per cent in the economic dimension and 90 per cent in the political dimension. Figure 8, Regional Performance 2020, Global Gender Gap Report 2020, p. 22

³⁰⁰ <https://data.worldbank.org/indicator/SL.TLF.ACTI.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

³⁰¹ <https://data.worldbank.org/indicator/SL.TLF.ACTI.MA.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

³⁰² <https://data.worldbank.org/indicator/SL.TLF.ACTI.FE.ZS?end=2020&locations=UA-KZ-RU-UZ-IR-TR&start=1990&view=chart>

³⁰³ <https://data.worldbank.org/indicator/SL.TLF.TOTL.FE.ZS?locations=UA-KZ-RU-UZ-IR-TR>

³⁰⁴ <https://amar.org.ir/Portals/0/News/1398/bikari98-3.pdf>

³⁰⁵ Ibid.

³⁰⁶ The industry in Iran includes the subsectors of mining, power, gas and water, as well as buildings.

³⁰⁷ <https://www.cbi.ir/SimpleList/2072.aspx>

nationwide.³⁰⁸ How those jobs are divided up between women and men is unknown.

On average women in Iran are as badly underrepresented at management levels as in employment in general. In the current Global Gender Gap Report, the World Economic Forum estimates the share of women holding management positions in politics and industry at an average of 20.5 per cent.³⁰⁹ Thus four times more men than women are represented at management levels and participate in political and economic decision-making processes. Women are better represented in the group of technical personnel, even if they remain underrepresented there too. In 2019 the share of women stood at 36.7 per cent and the share of men at 63.3 per cent.³¹⁰

In recent decades the participation of women in tertiary education has sharply increased. The Institute for Statistics of the United Nations Educational, Scientific and Cultural Organisation estimated the share of women in the total number of students at 46 per cent in 2018.³¹¹ The World Economic Forum found for 2019 that somewhat fewer women than men aspire to a higher educational qualification: 75 per cent of men and 64.3 per cent of women commenced studies at a university or polytechnic after secondary school.³¹² It is noteworthy that not only most male students in Iran choose technically oriented studies, but also most female students: 32 per cent of enrolled women and 52 per cent of enrolled men commenced a STEM subject course. The second most popular subjects among female students are business studies, administration and legal studies. At 28.4 per cent the enrolment rate for female students is roughly equal to that of male students at 27.9 per cent. The third most popular subjects among female students are engineering, construction and production, even though the enrolment rate for men (40.5 per cent) is more than double the rate for women (14.7 per cent). Significantly more women than men choose studies in the subjects of art and humanities, natural sciences and statistics, health and social affairs and education.³¹³ Although significantly fewer women than men are

employed in Iran, working women are better educated than their male colleagues: In 2018 the share of female employees with a university degree stood at 39.2 per cent, an increase of 3 per cent relative to the previous year. The share of male employees with a university degree stood at 20.4 per cent, an increase of 2.1 per cent relative to the previous year.³¹⁴ A trend can be derived from these figures that relatively more female than male university graduates will be appointed.

Sector-specific data on the shares of female employees in the energy sector is not publicly available or is not collected. What role women play in the energy industries in Iran has also not been investigated yet. The results of the dena survey on the most relevant barriers provide a good initial overview: A clear majority of the Iranian participants consider women in the energy sector to be at a disadvantage due to gender prejudice and discrimination. But the fact that women lack the self-confidence to assert themselves and be successful is also seen as a major obstacle. A lack of networks that specifically support women is also often specified as a barrier to those who aspire to a career in the energy sector or to professional advancement. Antiquated, mainly male-dominated working cultures and corporate structures also make it more difficult for women to access the energy sector.³¹⁵

Political framework conditions

Gender equality and women's rights are clearly described in the Iranian Constitution of 1928: all female and male citizens of the country are equally protected under the law and enjoy equal political, economic, social and cultural rights in accordance with Islamic rules.³¹⁶ The constitution stipulates that the government must protect women's rights in all areas and is responsible for ensuring that women can flourish and exercise their rights. The family is anchored in the Iranian constitution as the fundamental unit of society, in which women play

³⁰⁸ The information originates from AHK Iran.

³⁰⁹ The representation of women is extremely low particularly at the political level, in parliament and the ministries: According to information from the World Bank, their share stands at approx. 6 per cent.

³¹⁰ Country score card Iran, Global Gender Gap Report 2020, World Economic Forum, p. 189

³¹¹ <http://data.uis.unesco.org/>

³¹² Country score card Iran, Global Gender Gap Report 2020, World Economic Forum, p. 189

³¹³ Country score card Iran, Global Gender Gap Report 2020, World Economic Forum, p. 190

³¹⁴ The statistical figures are cited from an Iranian news medium. They are not publicly available. See:

https://www.mehrnews.com/news/4651177/%D9%87%D9%85%

[D9%87-%D8%A2%D9%85%D8%A7%D8%B1-%D8%A7%D8%B4%D8%AA%D8%BA%D8%A7%D9%84-%D9%88-%D8%A8%DB%8C%DA%A9%D8%A7%D8%B1%DB%8C-%D8%A8%D8%A7%D9%86%D9%88%D8%A7%D9%86-%D8%B3%DB%8C%DA%AF%D9%86%D8%A7%D9%84-%D8%B1%D8%B4%D8%AF-%D8%AD%D8%B6%D9%88%D8%B1-%D8%B2%D9%86%D8%A7%D9%86-%D8%AF%D8%B1-%D8%A8%D8%A7%D8%B2%D8%A7%D8%B1](https://www.researchgate.net/publication/263380740_Women%27s_Empowerment_in_Iran_A_Review_Based_on_the_Related_Legislations)

³¹⁵ See appendix

³¹⁶ [https://www.researchgate.net/publication/263380740 Women's Empowerment in Iran A Review Based on the Related Legislations](https://www.researchgate.net/publication/263380740_Women%27s_Empowerment_in_Iran_A_Review_Based_on_the_Related_Legislations)

an important role.³¹⁷ The legislative principles enable the empowerment of women in Iranian society within the framework of the Sharia.

In the course of the Islamic Revolution at the end the 1970s, women's rights were pruned and achievements of the women's movement were undone. For example the Family Protection Act of 1979 was annulled when the Sharia was introduced.³¹⁸ Gender equality was only gradually integrated into the country's economic, social, cultural and political development plans from the 1990s.³¹⁹ The first steps for the strengthening of women were agreed in the third development plan and by the Presidential Center for Participation of Women (CPW) for the period 2000 to 2005. The CPW was established in 1997 under the Office of the President to plan and coordinate activities for the advancement of women and control their implementation. The CPW's task is to identify the challenges and problems that women face, develop possible solutions and implement them with the help of public administration. The CPW is active in the areas of education, culture, sport, economic participation, women's legal affairs and the development of female non-governmental organisations.³²⁰ It works to ensure that Iran signs the United Nations Convention on the Elimination of all Forms of Discrimination against Women (CEDAW), although it has so far failed to do so.³²¹ In 2005 the CPW was renamed Center for Women and Family Affairs (CWFA) and its area of activity was extended. In 2013 the position of the CWFA and therefore the institutional anchoring of gender equality were further strengthened in that the head of the CWFA was promoted to the cabinet position of Vice-President for Women's and Family Affairs³²². The current officeholder is the first woman in the Iranian cabinet since 1979 and the third in the history of the country.³²³

Further attempts were also made to anchor approaches to the empowerment of women institutionally and for all

state organisations with binding effect in the fourth development plan for the period 2005 to 2009, with the support of civil society institutions.³²⁴ The sixth development plan provides for the strengthening of women in five areas for the period 2016 to 2021: family, health, employment, social security and social hardship. Measures against discrimination against women and for gender equality are key. The approach to the social, economic and political strengthening of women is based on the protection of the welfare and integrity of the family and pursues the aim of creating balance between the multi-faceted roles that women play in the family and in society.³²⁵ The measures are aimed at increasing the literacy and employment rate for women and closing the gender gap in primary and secondary education. The employment measures are oriented towards combating women's unemployment and putting housewives in employment.

The CWFA is also responsible for monitoring the implementation of the measures within the framework of women's policy. For that purpose the Centre for Women's and Family Affairs collects various data in order to verify the achievement of the objectives.³²⁶ Within the framework of the approved action plan for the improvement of the status of women and families 176 indicators for gender equality have been developed and summarised in seven areas of activity: education, health, employment, sport, security and social and political participation. In order to increase the political participation of women in Iran, a 30 per cent women's quota for management positions in national government institutions, general administration and executive bodies has been adopted. The action plan is implemented at the provincial level by the Women's Affairs Offices of the Secretary of States.³²⁷ In cooperation with the Governmental Management Training Center, women employed in the public sector are trained at national and provincial level and thus prepared for management

³¹⁷https://www.researchgate.net/publication/263380740_Women's_Empowerment_in_Iran_A_Review_Based_on_the_Related_Legislations

³¹⁸ <https://learningpartnership.org/resource/family-protection-act-iran-document-english>

³¹⁹https://www.un.org/womenwatch/daw/Review/responses/IRA_N-English.pdf

³²⁰ Ibid.

³²¹ <https://www.hrw.org/news/2020/03/12/iran-universal-periodic-review-outcome-statement>

³²² The Iranian cabinet is a formal body consisting of government officials and ministers, who are appointed by the President.

³²³ <http://women.gov.ir/en>

³²⁴https://www.researchgate.net/publication/263380740_Women's_Empowerment_in_Iran_A_Review_Based_on_the_Related_Legislations

³²⁵ [https://financialtribune.com/articles/people/28545/6th-plan-seeks-to-empower-women-in-five-](https://financialtribune.com/articles/people/28545/6th-plan-seeks-to-empower-women-in-five-areas?_cf_chl_jschl_tk_=aac2d8206430ea7949d7f3ecf2dc7e41805c681b-1612884865-0-AdF0q9R0Ev1JLmxkNzZ5uDBUgZuu6MABMbtdXWC0_Q50_rGU07usaoRTaQQ9ji7ST-E71EDEM9avFoPuK4XKYi-mRX_MWzBpu1mBaysFNqL_uwCjMABMznXGeEi6_WX-wYt-LJ3-ubHZ3sHfclV3GZkFGtdcZDh_uc9MJRlIUlxZYmBjx2rs3-jhgEdglIT0ZwLLihSux-7r2FKnhkqrqifEVqSemC6Bab5CzSU12ni-FVjOtkXel7mxXWEzqg9S1Lz4ITlwZQfiNjUx-jrKmjA0D8HnVbtZuPCxWrTCbD_a2ufk3smrxz5M8JH5Za1thGLV-mu-U_OcrOitTxN8sP9lr66ct5amu_X6vkPbs2a70bMtgo7uvWFKt-rWGVXR7-KgVYnjvNTLjwaNhlhe4)

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[jhgEdglIT0ZwLLihSux-7r2FKnhkqrqifEVqSemC6Bab5CzSU12ni-FVjOtkXel7mxXWEzqg9S1Lz4ITlwZQfiNjUx-](https://www.researchgate.net/publication/263380740_Women's_Empowerment_in_Iran_A_Review_Based_on_the_Related_Legislations)

[jrKmjA0D8HnVbtZuPCxWrTCbD_a2ufk3smrxz5M8JH5Za1thGLV-mu-U_OcrOitTxN8sP9lr66ct5amu_X6vkPbs2a70bMtgo7uvWFKt-](https://www.researchgate.net/publication/263380740_Women's_Empowerment_in_Iran_A_Review_Based_on_the_Related_Legislations)

[rWGVXR7-KgVYnjvNTLjwaNhlhe4](https://www.researchgate.net/publication/263380740_Women's_Empowerment_in_Iran_A_Review_Based_on_the_Related_Legislations)

³²⁶ [http://women.gov.ir/fa/news/14264/the-field-of-women-entrepreneurs-is-one-of-the-most-important-parts-of-the-](http://women.gov.ir/fa/news/14264/the-field-of-women-entrepreneurs-is-one-of-the-most-important-parts-of-the-document-to-improve-the-status-of-women-and-the-family)

[document-to-improve-the-status-of-women-and-the-family](http://women.gov.ir/fa/news/14264/the-field-of-women-entrepreneurs-is-one-of-the-most-important-parts-of-the-document-to-improve-the-status-of-women-and-the-family)

³²⁷ <http://dolat.ir/detail/329511>

positions. For that purpose a platform has been set up with the aim of strengthening women's management skills.³²⁸

Besides the CWFA, other institutions have been created for the purpose of strengthening women in policy-making. They include Women and Family Socio-Cultural Council and positions in all ministries and governmental bodies that advise on women's affairs, the Women's Faction in the Islamic Consultative Assembly (Iranian Parliament) and the Special Committee for Women and Youth at the Secretariat of the Expediency Discernment Council of the System.³²⁹

Social framework conditions

Before the Islamic Revolution at the end of the 1970s, women's rights and possibilities with regard to social and political participation were extended. Women's organisations and women's magazines were also set up.³³⁰ After 1979 many accomplishments were taken back by the government. While civil society organisations technically remained protected by the constitution, their area of responsibility was restricted as far as the authorities deemed it appropriate.³³¹ At the beginning of the 2000s women's organisations were strengthened in that they were actively involved by the Presidential Center for Participation of Women (CPW) in its work or received support for the implementation of programmes. As a result, a freer civil society space was created. However, non-governmental organisations (NGOs) remained small and informally organised and had no financial resources to implement their own projects. A study carried out by the United Nations Development Programme calculated in 2000 that of a total of 700 NGOs 137 were oriented towards women and development. A central conclusion that followed from the examination of the civil society landscape in Iran was that women's organisations were the leading players in the development of Iranian civil society.³³² Though little is known or documented about active women's organisations in Iran, the promotion of gender equality is one of the areas of most intensive civil society engagement. The women's movement in Iran is described as an implicit, uncoordinated, decentralised movement that spans generations, classes and ethnic

groups.³³³ Civil society in Iran has developed with stronger roots in local traditions and communities and is virtually completely financed from local resources. Unlike in the other countries examined in this study there are hardly any collaborations between Iranian NGOs and international organisations. The limited international financing for civil society in Iran is channelled through the United Nations and requires the full consent of the government. The unsure financing of civil society activities is a major challenge for the players, particularly with regard to the work on long-term issues.³³⁴

Individual female activists and campaigns are characteristic for the women's movement in Iran. The fact that the Iranian lawyer, judge and human rights activist Shirin Ebadi was awarded the Nobel Peace Prize in 2003 led to international recognition of the Iranian women's movement.³³⁵ In 2006 the campaign "One Million Signatures" was launched, which was initiated by over 50 female and male activists, including Shirin Ebadi.³³⁶ This movement concerns itself with gender discrimination in the Iranian legal system. It explains to the public the legal status of women, collects signatures for a petition for the amendment of discriminatory laws and brings pressure to bear on the legislator. The movement pursues a vision of changing social and cultural standards.³³⁷ Even though the signatures were not officially counted, the movement achieved great reach at local, national and international level. This grassroots movement has succeeded in setting up a network consisting of various communities and civil society players and raising people's awareness of gender equality. The movement contributed to the amendment of the Act on Inheritance and Protection of the Family in favour of women in 2008.³³⁸

Women's networks

As yet there are no sector-specific women's networks in Iran. This is also confirmed by the female energy experts who were interviewed. However, there are some organisations which have set themselves the task of providing support for businesswomen in Iran.

The National Association of Women Entrepreneurs (NAWE) was established in 2004 and promotes a culture

³²⁸[https://asiapacificgender.org/sites/default/files/documents/Iran%20\(Islamic%20Republic%20Of\)%20\(English\).pdf](https://asiapacificgender.org/sites/default/files/documents/Iran%20(Islamic%20Republic%20Of)%20(English).pdf)

³²⁹https://sustainabledevelopment.un.org/content/documents/13097Islamic_Republic_of_Iran_review_Beijing20.pdf

³³⁰ You can find a list of women's organisations that were established before 1979 in: Civil Society Organizations and Empowerment of Women and Girls in Iran, Institute for Global and International Studies, The George Washington University, Milad Pournik, 2013, p. 6 or online: [https://cpb-us-e1.wpmucdn.com/blogs.gwu.edu/dist/1/1435/files/2018/04/igis06_ggp04.cso-qgi55v.pdf#%5B%7B%22num%22%3A96%2C%22gen%22%3A0%](https://cpb-us-e1.wpmucdn.com/blogs.gwu.edu/dist/1/1435/files/2018/04/igis06_ggp04.cso-qgi55v.pdf#%5B%7B%22num%22%3A96%2C%22gen%22%3A0%7D%2C%7B%22name%22%3A%22XYZ%22%7D%2C69%2C720%2C0%5D)

<https://tavana.org/en/en/content/one-million-signatures-battle-gender-equality-iran>

³³¹ Ibid.

³³² Ibid.

³³³ Ibid.

³³⁴ Ibid.

³³⁵ Ibid.

³³⁶ <https://tavana.org/en/en/content/one-million-signatures-battle-gender-equality-iran>

³³⁷ Ibid.

³³⁸ Ibid.

INFOBOX DENA-INTERVIEW



Nasim Shekari

Nasim Shekari studied chemical engineering in Iran, focusing on the process industry. She completed her masters degree in innovative and sustainable process technology in Sweden. She gained experience of gender discrimination as a power engineer with a petrochemical company in the south of Iran. At that time she found the male-dominated sector to be hard to access for women, even though the company was one of the more progressive ones with regard to the recruitment of women. She started her international career at the United Nations Industrial Development Organisation (UNIDO) in the area of energy efficiency in energy-intensive industry. She currently works as a national project manager in an international project concerning energy efficiency and environmental factors in buildings under the supervision of the Vice-Presidency for Science and Technology and the United Nations Development Programme (UNDP), and reports on Iran.

“I have learned a lot from colleagues and superiors, but I drew my biggest motivation for pursuing my professional goals from within myself. Interest, enthusiasm, love and passion are the key factors in my success in overcoming barriers. Self-confidence is also required. One must believe in oneself and one’s mission. If you have that you no longer have to prove yourself to other people. These days women are much stronger in Iran and can take on important roles in politics and industry. Besides technical expertise social skills are also important. Women are generally more sensitive in human communication and more empathetic than men. They keep an eye on the big picture, while men tend to immerse themselves in technical aspects. Women can use this to their advantage. There is a kind of invisible partnership between men. They support each other. For me networking is a new, enriching experience. I learn from a Pakistani women’s network. In Iran strong, successful women are barely visible. However, female role models would strengthen the cooperation between women and help to overcome competition. In most Iranian ministries there is a department for strengthening women. That is a good start. It is the government’s task to issue appropriate rules and regulations to ensure that the share of women in management positions increases. Also crucial is the cultural and social acceptance of women in technical professions. Families are the key for equitable raising and education of children.”

of female entrepreneurship in Iran. The NAWE is financed through membership subscriptions and supports female Iranian entrepreneurs on the way to sustainable, fair development, by providing advice, information and networks.³³⁹ The women’s network collects data on the role of female entrepreneurs in Iran itself, analyses it and conducts research in that area. The NAWE works with various other organisations which specialise in the promotion of businesswomen and are familiar with the applicable legal framework. The NAWE cooperates both with national organisations, for example the country’s ministries, and also non-governmental institutions, such as national associations or other national and or international civil society organisations that promote women’s start-ups. The women’s network performs lobbying work and advises the government on draft legislation or government plans that affect the business community. The NAWE provides seminars, conferences and workshops on the subject of the business community. It offers its members a wide range of networking opportunities and encourages dialogue between the different stakeholders in the area of the business community. The women’s network has various issue-specific committees and working groups. The working group in the area of industry and trade signed a Memorandum of Understanding with the Iranian Trade Development Organization which establishes the cooperation between the two organisations for the promotion of female manufacturers and artisans. The working group also met the Ministry for Industry and Mining and obtained a commitment to set up a Women’s Cooperation Desk in the Industry and Mining Room to address the challenges faced by women in that sector. The sanctions and continuing recession in Iran have hampered the cooperation as well as joint activities of the NAWE with the two organisations.³⁴⁰ It is not known to what extent the women’s network is still active. The annually changing executive board was published on the website for 2019.³⁴¹

The founder of the NAWE Firoozeh Sabe established a further NGO in 2005: the Entrepreneurship Development Foundation for Women and Youth (EDF).³⁴² EDF pursues the goal of promoting entrepreneurship among young people, women and locally-based organisations throughout the country, focusing on less developed regions of Iran. Since 2014 the EDF has had special consultative status at the United Nations Economic and Social Council (ECOSOC). Within the framework of that role the EDF plans an event each year in March at the United Nations Commission on the Status of Women. The EDF is mainly active in three areas: It promotes the

³³⁹ <https://nawe.ir/en/about/>

³⁴⁰ <https://nawe.ir/en/units/workforce-industry/>

³⁴¹ <https://nawe.ir/en/structure/>

³⁴² <https://foundationed.ir/en/about>

development of the local community with a business and entrepreneurial approach. In order to support young people of both genders the EDF is implementing a youth empowerment project with a business and entrepreneurial approach. In several schools the EDF has installed the school support programme Entrepreneurship Lab in Schools.³⁴³ For that purpose it organises workshops, a competition for the best business ideas and a festival at which products are exhibited and sold.³⁴⁴ In order to draw attention to the work of civil society organisations and encourage cooperation between non-governmental organisations, since 2012 the EDF has organised roundtables for mutual exchanging of knowledge and experience with other organisations in the same subject area.

Conclusion

Since the end of 1990s progress has clearly been made in Iran, whilst protecting Islamic values, in the anchoring of gender equality and the advancement of women. Following the establishment of the CPW, now the CWFA, women's rights and gender equality have been institutionally anchored and successively extended. The extension and strengthening of the role of the CWFA provided women with a political lobby. Since then activities for the advancement of women have been coordinated and implemented with the involvement of civil society organisations. In the last five years Iran's women's policy has focused on gender equality in the context of the family as well as social, economic and political participation. The CWFA has succeeded in enforcing a 30 per cent women's quota for management positions in national government institutions, administrative authorities and executive bodies.

Improvements have primarily been made through investments in the infrastructure of the health and educational system and inequalities between the genders have been reduced.³⁴⁵ Nevertheless critical points remain. National laws continue to discriminate against women when it comes to access to the labour market, and therefore conflict with international standards on legal equality of the genders.³⁴⁶ As in post-Soviet Union states it is prohibited for women to pursue certain professions deemed to be too dangerous.³⁴⁷ To some extent differing legislative frameworks for women and men have contributed to gender prejudice and

stereotypes manifesting themselves in society and favour the segregation of the labour market. On the other hand coercive unilateral and multilateral sanctions and the currency crises are weakening Iran's economy and constitute an obstacle to the economic participation of women. At the same time working women in Iran are on average better educated than men. The number of well-educated women has increased in the last two decades and gender parity now prevails in that respect. Nevertheless the number of female academics is not reflected in real employment: only a fifth of women fit for work are in employment and predominantly in the service sector or as technical workers. At management levels women are equally underrepresented as in employment as a whole. The number of female entrepreneurs is not known. Also, no data on the energy sector or gender distribution in it is publicly available.

Women's organisations have assumed a leading role in the development of Iranian civil society. The promotion of gender equality is one of the strongest areas of civil society engagement. The women's movement primarily focuses on gender equality in legislation, the prevention of violence and the strengthening of women's rights, which were cut back with the Islamic Revolution at the end of the 1970s. Little is known about women's organisations in Iran, but they are predominantly informally organised and do not have their own financial resources. The women's movement in Iran is considered implicit, non-hierarchically organised and decentralised, and most importantly is thought to include a grassroots movement. In the 2000s it succeeded in setting up a network from different communities and civil society players, raising awareness for gender equality, bringing about legal amendments and generating international attention. Sector-specific women's networks do not exist in Iran yet, except for a few women's organisations that promote female entrepreneurs. The NAWE assumed a key role in that it supported its members with advisory services and various activities for competence building, both directly and, through lobbying work, indirectly. The work of the NAWE is exemplary, as the women's network cooperates with state-owned and non-state-owned organisations, seeks dialogue with the ministries and puts the challenges faced by women in the industrial sector and commerce on the political agenda.

³⁴³ Ibid.

³⁴⁴ Civil Society Organizations and Empowerment of Women and Girls in Iran, Institute for Global and International Studies, The George Washington University, Milad Pournik, 2013, p. 35 et seq.

³⁴⁵ [https://asiapacificgender.org/sites/default/files/documents/Iran%20\(Islamic%20Republic%20Of\)%20\(English\).pdf](https://asiapacificgender.org/sites/default/files/documents/Iran%20(Islamic%20Republic%20Of)%20(English).pdf)

³⁴⁶ This refers to the Beijing Platform for Action. See: https://www.researchgate.net/publication/290365758_A_critical

[study_of_the_effect_of_gender_on_prohibition_of_women_employment_in_iranian_law](#)

³⁴⁷ <https://www.hrw.org/report/2017/05/25/its-mens-club/discrimination-against-women-irans-job-market> and <https://financialtribune.com/articles/people/28545/6th-plan-seeks-to-empower-women-in-five-areas>

The female energy experts who took part in the dena survey would above all like to see more female role models and a change of the male-dominated working and corporate culture. They see a powerful lever for an improvement of their situation in the government's responsibility to guarantee equal career opportunities for women and men. Companies can also make a

contribution to more gender equality by developing and internally implementing a gender equality strategy in order to encourage women in their professional development.³⁴⁸

³⁴⁸ See appendix

Recommendations for action

Women's organisations have a long tradition in the post-Soviet states and play an important role as civil society players. The focus of their engagement is primarily on the funding of female sole proprietors and businesswomen with small and medium-sized companies. Industry-specific women's networks in the energy sector have only recently been established in Ukraine, Kazakhstan, Russia and Turkey. In Uzbekistan and Iran there are as yet no specific women's networks in the energy industries.

The support mechanisms for equal opportunities and the empowerment of women depend on the political framework on the one hand and the social framework on the other. Thus the legislative and executive as well as civil society institutionalisation in the countries examined differs, while the challenges and needs for support are largely similar.

With a strong state and strong industry, and with the support of international organisations as a partner, Kazakhstan is playing a pioneering role with its recently adopted equality strategy. The participation of women in decision-making processes is to be increased through gender quotas for state management bodies and companies with state participation. The role of women in the energy sector is being actively strengthened with the help of the government-initiated women's network KAZ Women's Energy Club (KAZ WEC) and internal company women's networks from the crude oil and natural gas industry. There are no women's networks in Kazakhstan which specifically bring together female experts from the renewable energies industry.

In Ukraine gender equality is also institutionally anchored and is being transferred into the executive bodies. However, gender quotas apply exclusively for local elections, in order to increase the political participation of women at local level. Women are promoted in the energy sector above all by national and international civil society organisations, as well by a few companies which have introduced a gender policy themselves. The women's network Women Energy Club of Ukraine (WECU), which is run on a voluntary basis as an association of female energy experts focusing on the energy transition, is a driving force and highlights inequalities in the energy sector, as well as possible solutions for overcoming obstacles.

Despite comprehensive reforms, Russia's gender equality policy is still based on traditional family values. Mainly state-controlled women's organisations like the Women's Union of Russia (WU) are supported by the state. Female energy experts are not specifically supported in Russia. Women in Energy is the first sector-specific women's network that brings together women from the energy

industry and politics. Women in Energy has thus far been informally organised and aims to formally establish itself as a non-governmental organisation. Like Women Energy Club of Ukraine (WECU), Women in Energy is organised as an independent entity that relies on voluntary work.

Uzbekistan has also recently made progress in the institutionalisation of gender equality. The roadmap for the implementation of the energy ministry's national equality strategy, which among other things aims to change the personnel policy and corporate culture in energy companies with state participation, is exemplary. Civil society initiatives in specifically technical or energy-related areas are rare in Uzbekistan. There is also as yet no women's network in the energy sector. One of the first initiatives – Tech4Impact – supports in its activities, among other things, the founding of companies by women in the green energy industry and raises awareness among girls for STEM subjects in order to increase the still very limited number of female academics.

In Turkey important legislative changes for equal opportunities for women and men have been carried out, but the employment programme for the gender equality policy is not directed at the energy sector. The recently set up women's network TWRE fills that gap and has developed within a short period of time into an important civil society player. It is primarily active in the renewable energies industry and promotes women's careers in it by networking female experts with each other, bringing them together with potential employers and developing technically oriented educational programmes.

In Iran the economic and political participation of women is by far the weakest compared to the other countries examined. At the same time access to education has developed positively. The number of well-educated women has hugely increased, even if it is not reflected in the country's workforce. Civil society structures are formalised and institutionalised to a very limited degree. Therefore there are also no women's networks in energy-relevant areas.

All the countries are united by the fact that there is largely great potential in terms of a pool of educated women, but

that potential is not exploited. Obstacles mostly exist for women with regard to professional advancement to (higher) management positions. Women are technically as well educated as men. But they are often deployed in positions that do not correspond to their qualifications. An exception to this rule is Uzbekistan, where women's educational and qualification backgrounds are much worse than men's.

Across all the countries it is clear that the need for support for the purpose of strengthening women in the energy sector primarily relates to breaking up the strongly male-dominated working and corporate culture and the gender prejudice and stereotypes that lie behind it. The share of women in the energy sector will then be able to increase over time, provided that more female role models become visible, take up management positions and participate in decision-making processes in companies and energy policy. Women's networks that specifically support female energy experts have great potential to both effect a permanent improvement in women's career opportunities and empower women to actively contribute to shaping the energy transition.

Based on this analysis the networking activities of women's organisations and female energy experts can be easily integrated as an area of activity into energy dialogue and partnership programmes. The promotion of network activities in the examined countries could be arranged on three mutually supportive levels: first the promotion of an exchange of experience between female energy experts in existing and forming networks in the respective target countries, second bilateral and regional networking in the regions of Eastern Europe and Central Asia and third multilateral networking via the international women's network GWNET (Global Women Network of the Energy Transition). The recommended promotional measures may also be compared with approaches of other regions and countries within the framework of the energy partnerships and dialogues and continued in the long term at a supra-regional level.

1. Promoting exchanging of experience in the respective target countries

In those countries in which established women's networks already exist, such as Ukraine, Turkey, Russia and Kazakhstan, the identified female network representatives and energy experts can already be actively involved in the bilateral expert dialogue. A minimum participation of female representatives in the various working groups and events helps to ensure that gender distribution is more balanced, breaks up "all-male panels" and raises the stakeholders' awareness of gender equality in the energy transition. At the same time the visibility of female expertise is growing, so female energy

experts will be enabled to perform the function of a role model.

Countries like Uzbekistan and Iran in which there are no women's networks in the energy sector can be supported in setting up basic structures and programme points. The content should focus on the transformation of the energy systems. Already existing women's networks which are predominantly active in the conventional energy sector, for example in Kazakhstan, can be supported in setting up subnetworks that focus on the energy transition and the abandonment of coal. On powerful lever here, in particular, lies in capacity building and knowledge transfer relating to the global energy transition. Training courses and online training as well as study trips could be effective here and could be implemented with an established minimum share of women.

In cooperation with relevant local stakeholders there is great potential to further institutionalise the setting up, extension and maintenance of women's networks and anchor them in the civil society landscape of the respective country. Women's networks can be specifically promoted locally with the involvement of German (e.g. Heinrich-Böll-Stiftung) and international non-governmental organisations active in the target country, as well as embassies. Developing and intensifying partnerships between women's networks and organisations will help to ensure that women's networks can extend their own network as civil society players to include reliable partners. They facilitate the planning and implementation of joint activities and lay the foundation for regional and international networking.

The first steps towards the promotion of network activities in the countries in question involve shaping the cooperation with the identified women's networks and female energy experts and joint development of specific promotional measures. Within the framework of a digital workshop series, the results of this study and support approaches derived from them may be discussed and verified with the women's networks and female energy experts with the involvement of the Federal Ministry for Economic Affairs and Energy (BMWi) and other network partners. On the basis of the results and information obtained from the workshops, specific measures, the financing of joint projects, for example studies, analyses and events, and cooperation may be developed and established depending on the respective programmes.

2. Promoting bilateral and regional networking

The bilateral and regional exchange on expert issues, best practices and lessons learned may be very valuable with regard to overcoming the challenges related to the energy transition and climate protection to optimum effect. Because women's networks and female energy

experts can play a decisive role in strengthening energy dialogues and partnerships, they should be supported in the course of cross-national and regional networking. Thematic roundtables or network events are suitable formats for involving women's networks in the supra-national dialogue. More strongly institutionalised networks can share their experience and knowledge with networks which are rather informally organised or still in the process of being established. At the same time, expert dialogue on the country/region-specific challenges and opportunities in the course of the energy transition can be encouraged.

Particularly high visibility of top female experts can be achieved with the instrument of speaker placement. If the top female experts from the respective countries are identified, they can be specifically placed in regional, national and international conferences and forums focusing on the energy transition and female leadership and supported in their function as leadership figures. For the visibility of the female experts a country or region-specific list can be drawn up.

Mentoring is an efficient and effective support measure for strengthening and networking female energy experts. Mentoring programmes specifically address individual needs for support by matching mentors and mentees according to their preferences. Female experts benefit not only from the mutual exchange of experience and knowledge, which strengthens them in their technical and social skills – but also supra-national networking within

the framework of mentoring programmes can open up new career opportunities. Setting up mentoring programmes is therefore an important instrument for the advancement of women and has great potential to effect change. Such programmes should be set up with the involvement of the global women's network GWNET, which contributes expert knowledge and experience of setting up and implementing mentoring programmes.

3. Promoting multilateral networking

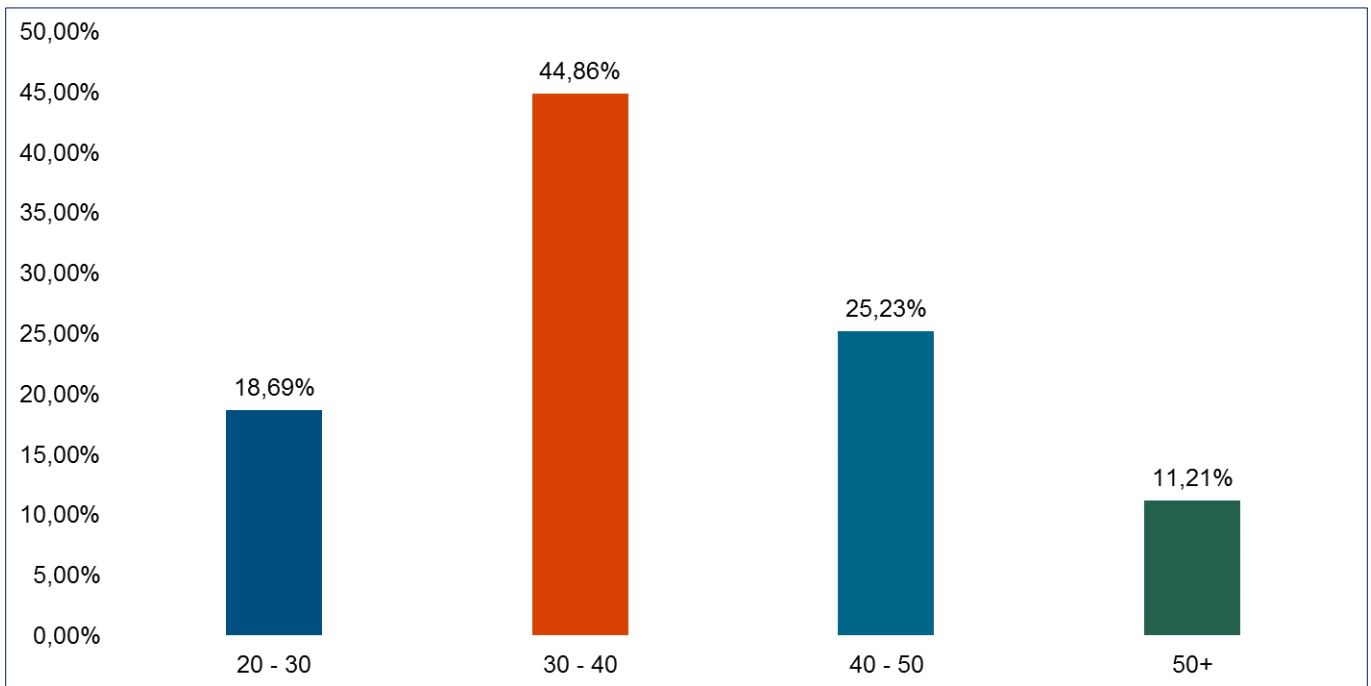
In the global women's network GWNET an established platform already exists that unites women's networks and female energy experts from numerous countries and plays an active role in the international advancement of women. In order to strengthen the multilateral cooperation, it is recommended that the identified women's networks and female energy experts from the countries in question be networked with GWNET and enabled to access the GWNET service portfolio, particularly the database containing profiles of female energy experts who are available as speakers on particular subjects and can be directly contacted. The planning and implementation of an international women's conference in cooperation with GWNET would bring together different national perspectives regarding the energy transition from the point of view of women and further strengthen the international community of female energy experts initiated by GWNET.

Appendix

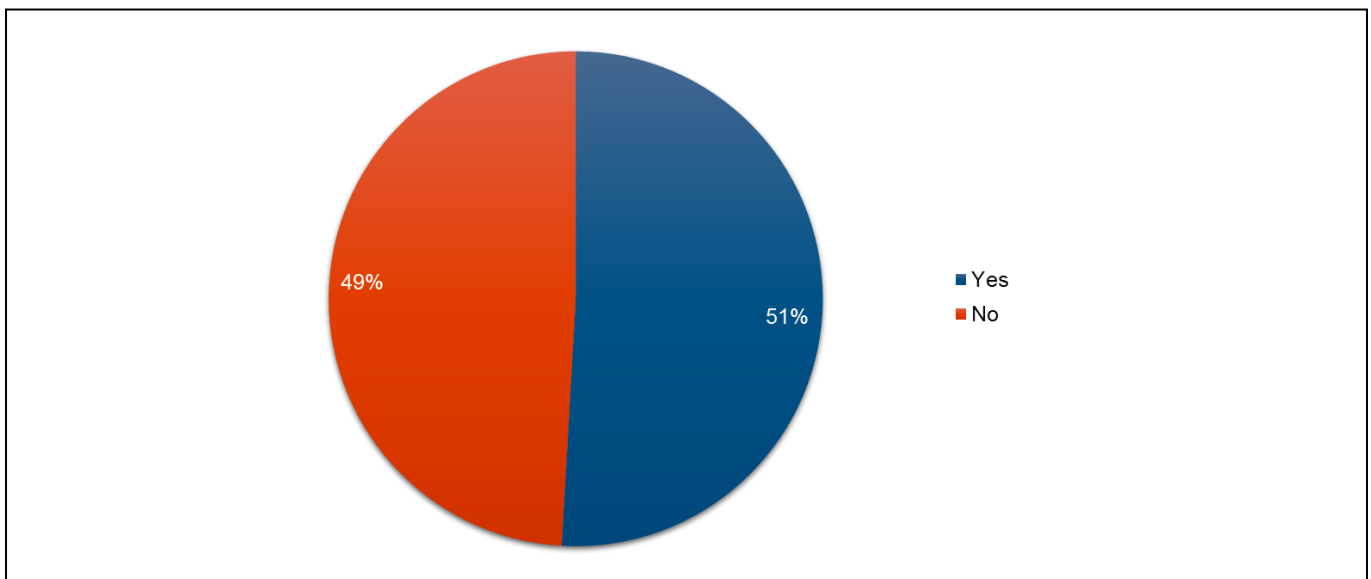
dena online survey results

112 female energy experts participated in an online survey which took place in the period from October to the end of November 2020.

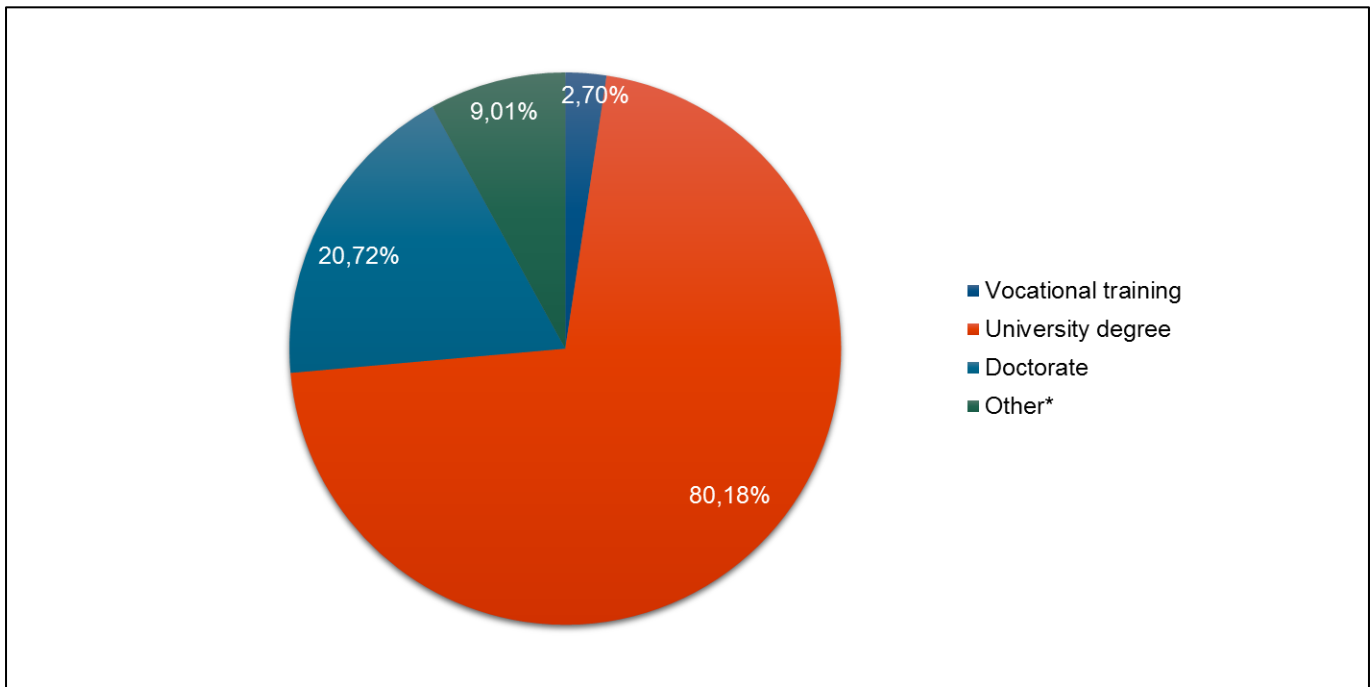
What is your age?



Do you have any children?

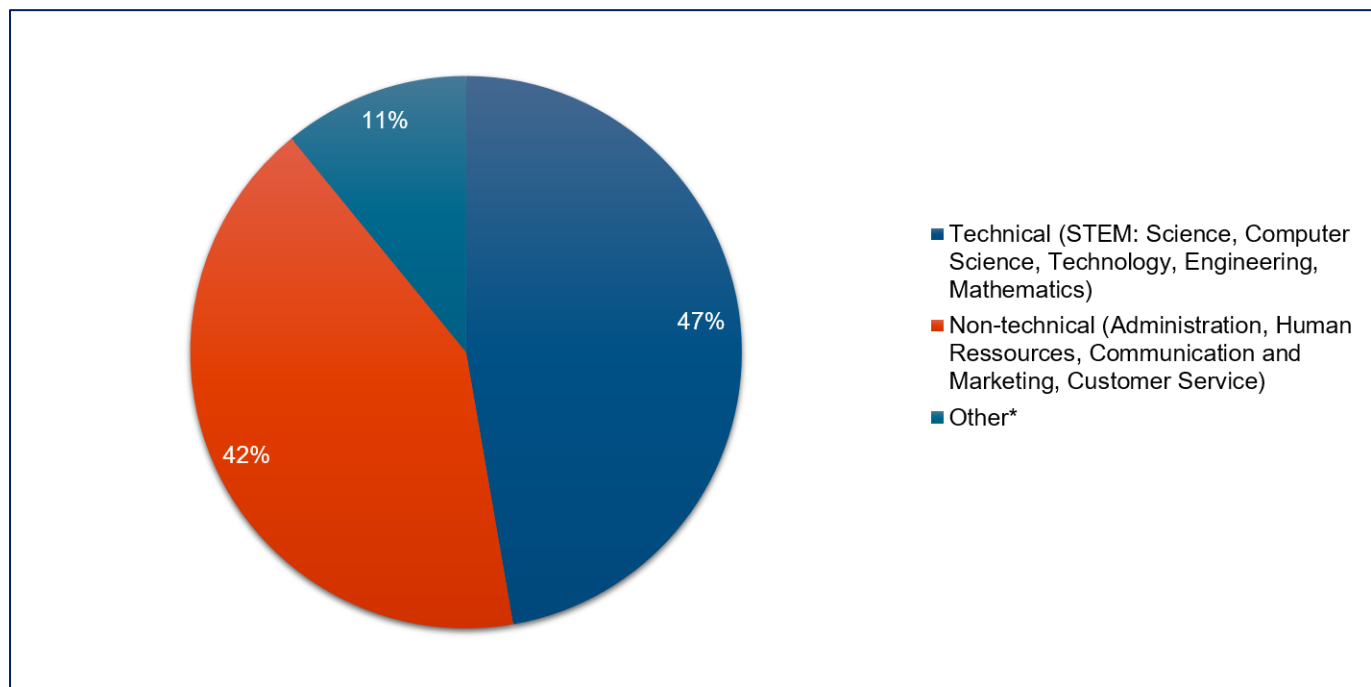


What qualification do you have?



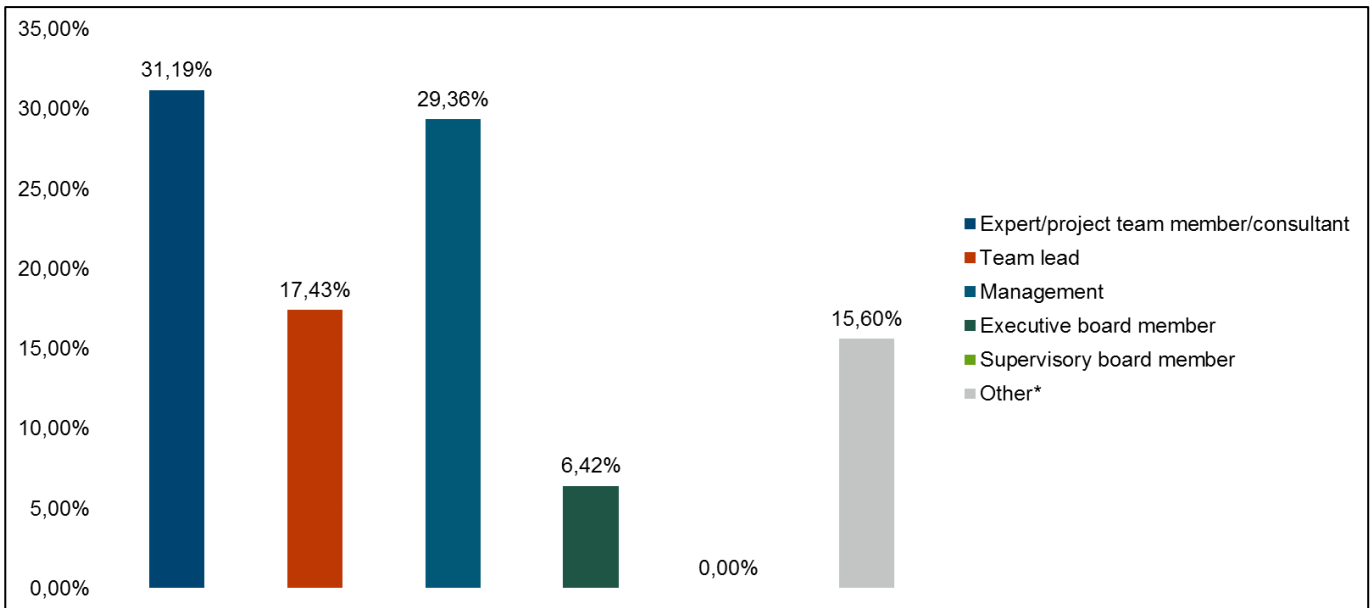
*In the input field of Other, the majority of the participants indicated a Master's degree, a minority indicated to have two degrees or two higher degrees and a postgraduate course.

What professional background do you have?



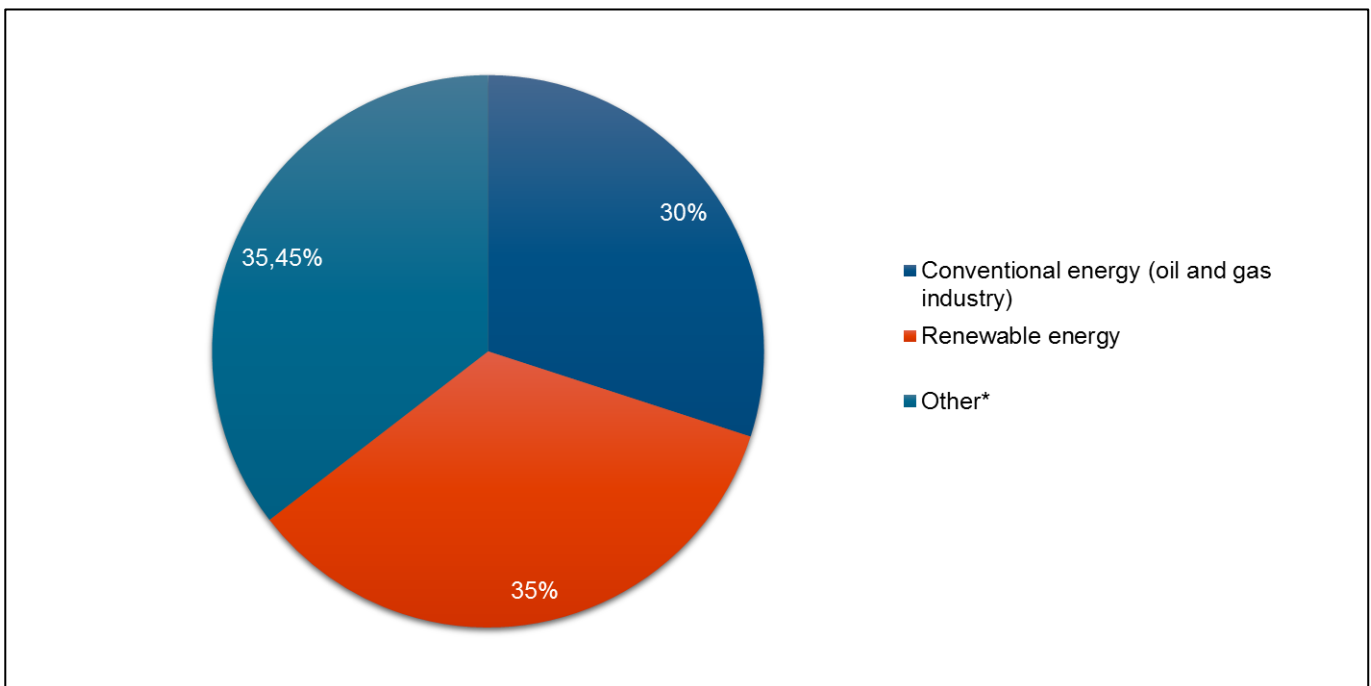
*In the input field of Other, the majority of the participants indicated to have both backgrounds. Further professional backgrounds that were mentioned are Economics, Education and Research, Public Service, Finance and Business Development, Gender Studies and International Law.

What position do you have at the moment?



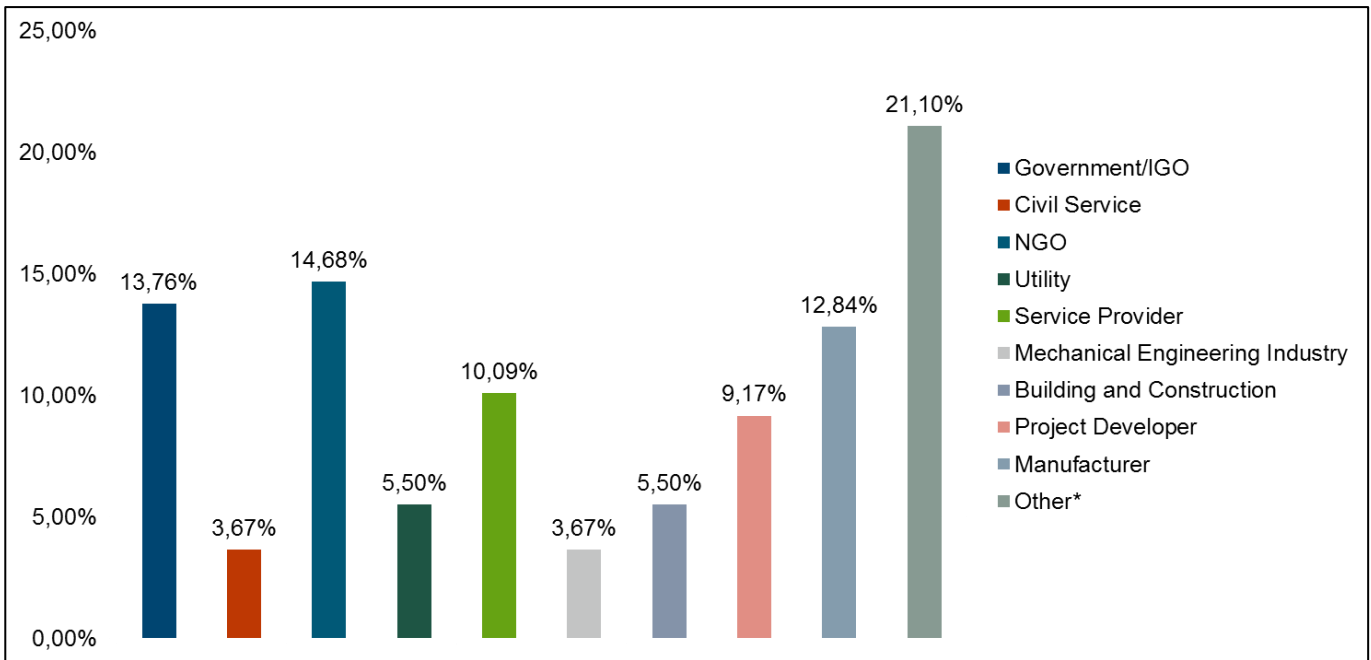
**In the input field of Other, the majority of the participants indicated to have a position in science, e.g. as an Academician, Postdoc or University Lecturer, or in Management as an Assistant. Further participants stated to be a Co-Founder or Partner or a student. Individual participants indicated to hold the position of an Accountant, Data Analyst, Managing Director, Chairman of the Internal Audit Commission or Chief specialist.*

In which sector do you work at the moment?



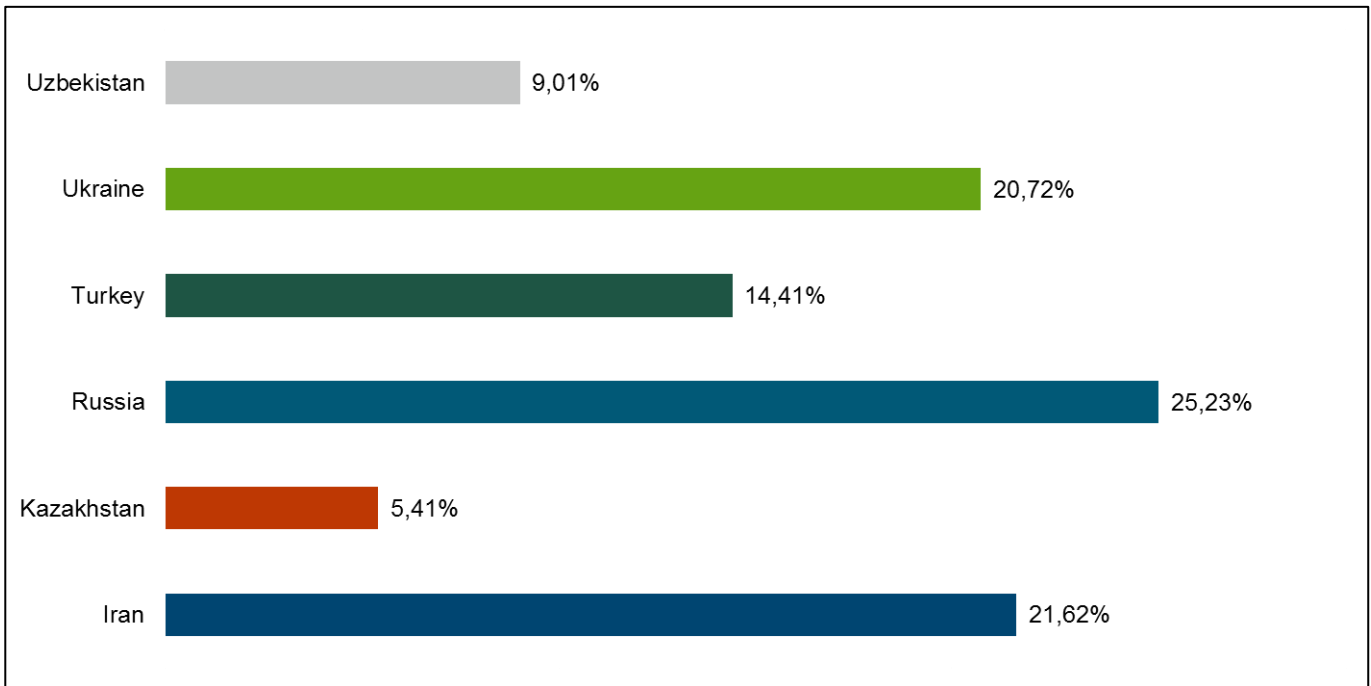
**In the input field of Other, the majority of the participants indicated to work in Energy Efficiency, or in both or all sectors of energy. Another major share of the participants stated to work in Education and Science. A minority of the participants work in the field of Communication. Individual participants indicated to work in Water and Energy, Digitalization, Construction, Electricity Transmission, Energy System Management, Energy Law, Energy Security, Housing Services, Inspection, Municipality, Nuclear Energy, Power Sector, Pharmaceuticals, Savings or stated to be unemployed.*

In what type of organization?

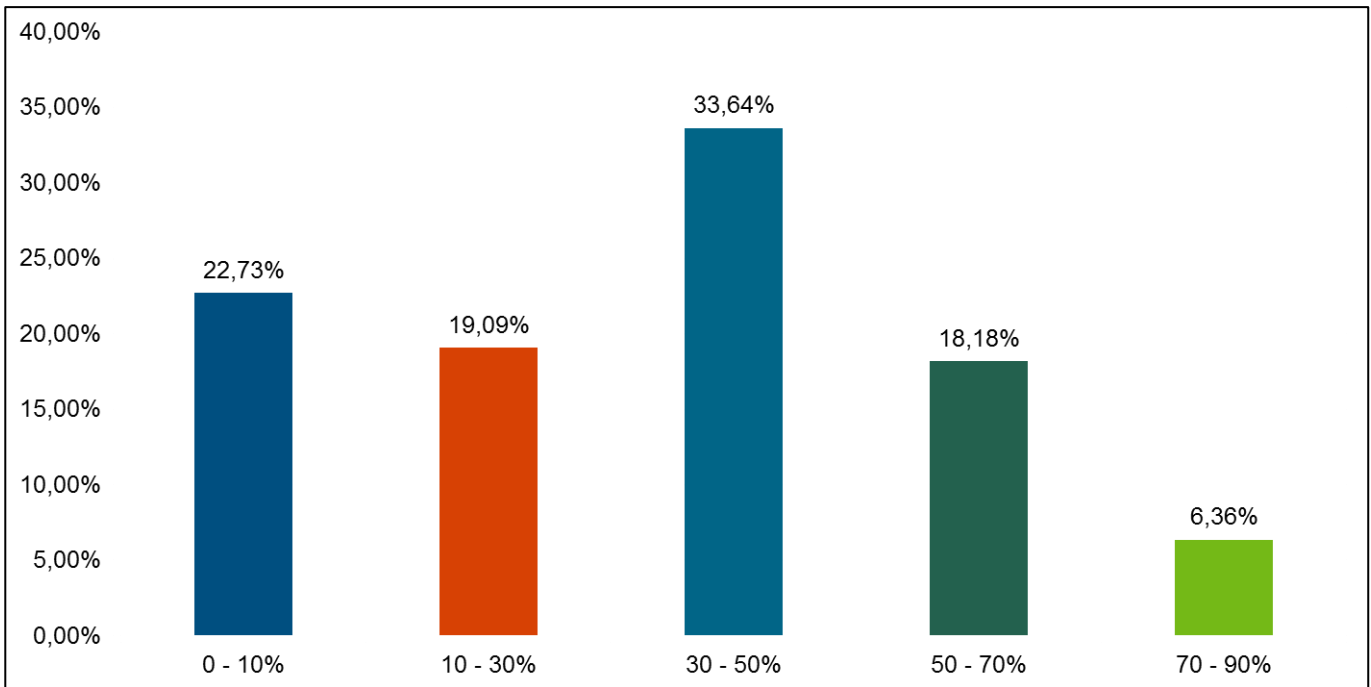


*In the input field of Other, the majority of the participants mentioned Education and Research as type of organization. A minority stated to work in representative offices. Individual participants mentioned Energy Management, Energy Consultant, General Contractor, Heat, International Organization, National Gas Company, Private and Public, Renewable Plant Owner, Start-up and Equipment and Services for Oil and Gas.

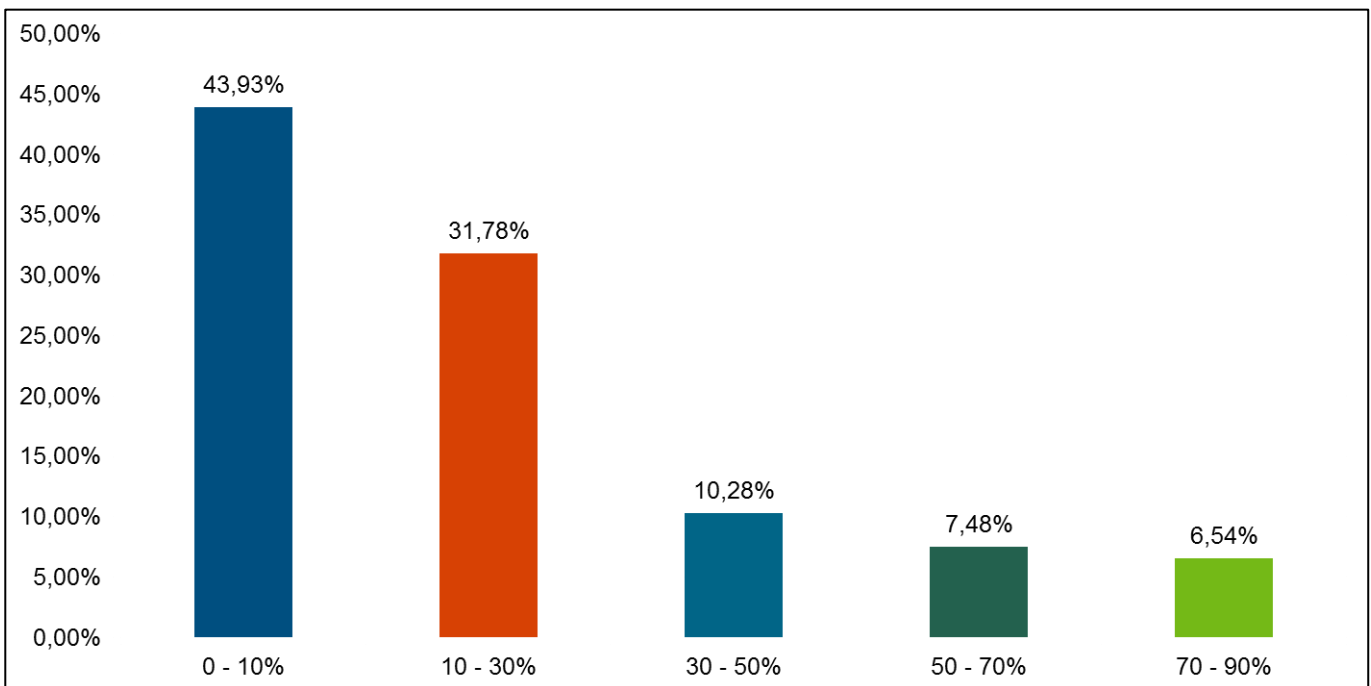
In which country do you work?



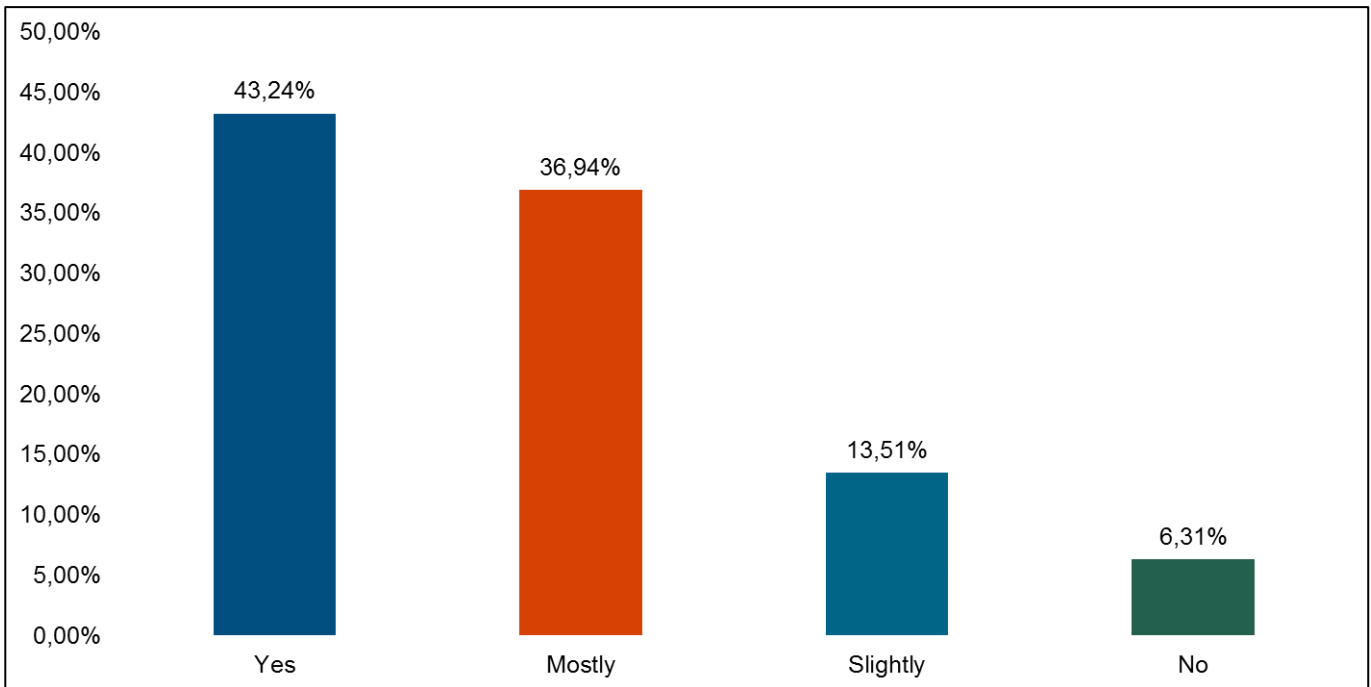
How many employees are female in the organization you work for?



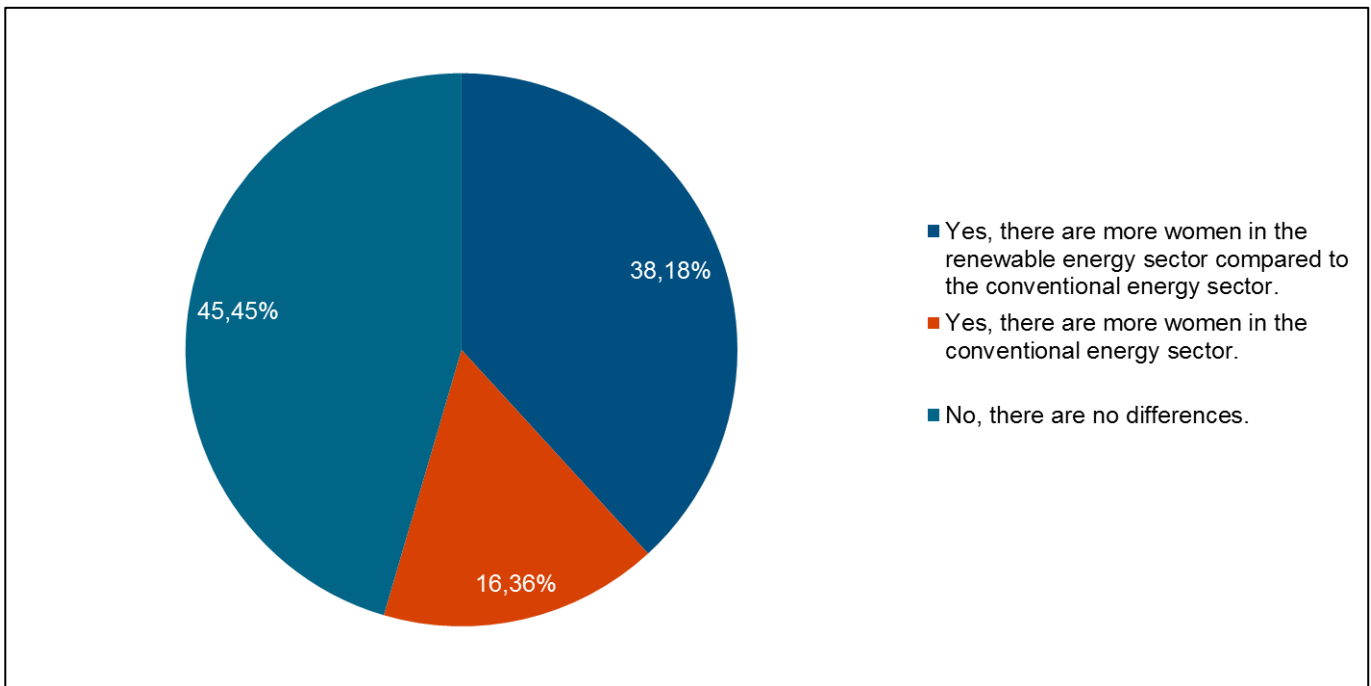
How many women are in a leadership position where you work?



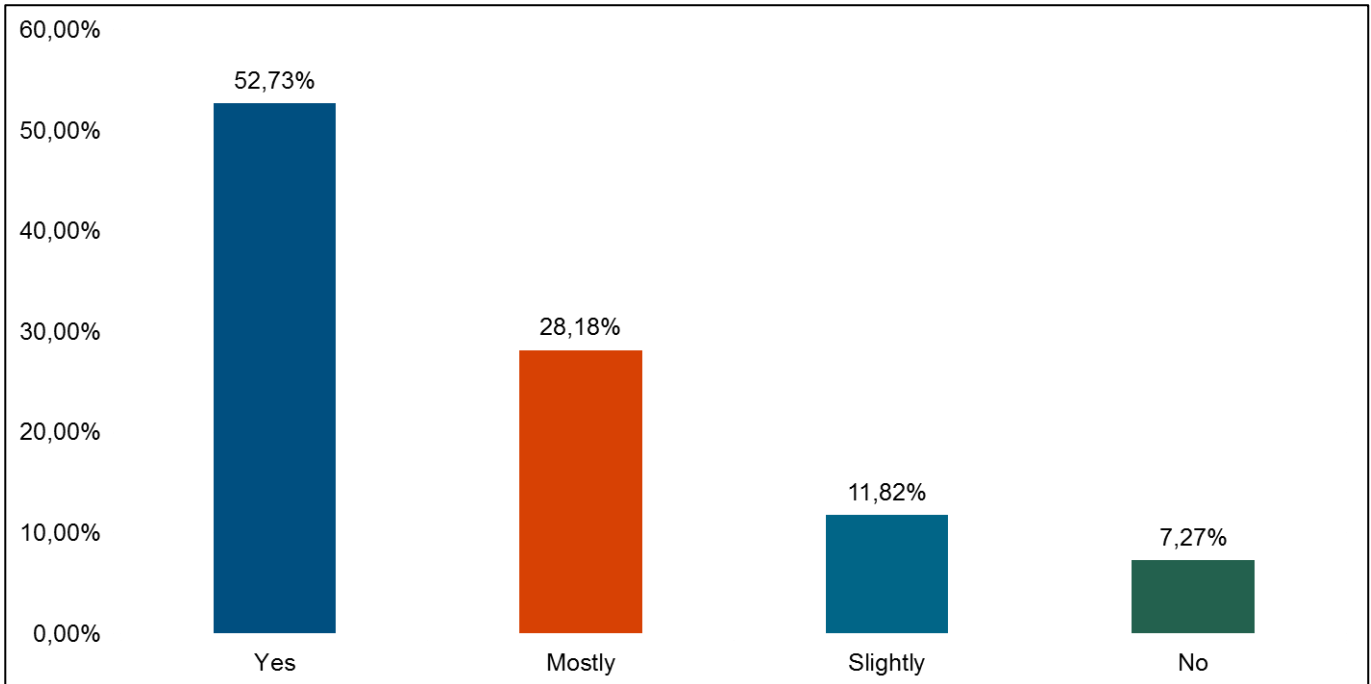
Do you think women are in general underrepresented in the energy sector in your country?



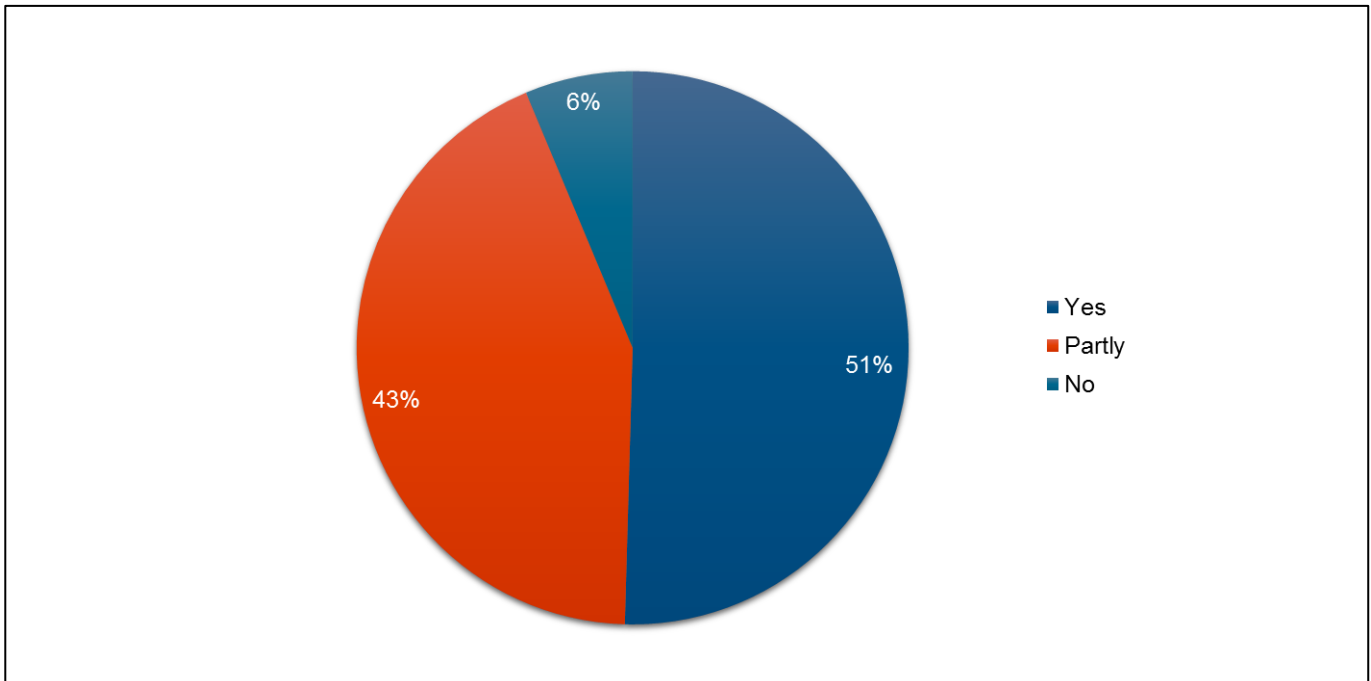
Do you see differences between the renewable energy sector and the conventional energy sector concerning gender diversity?



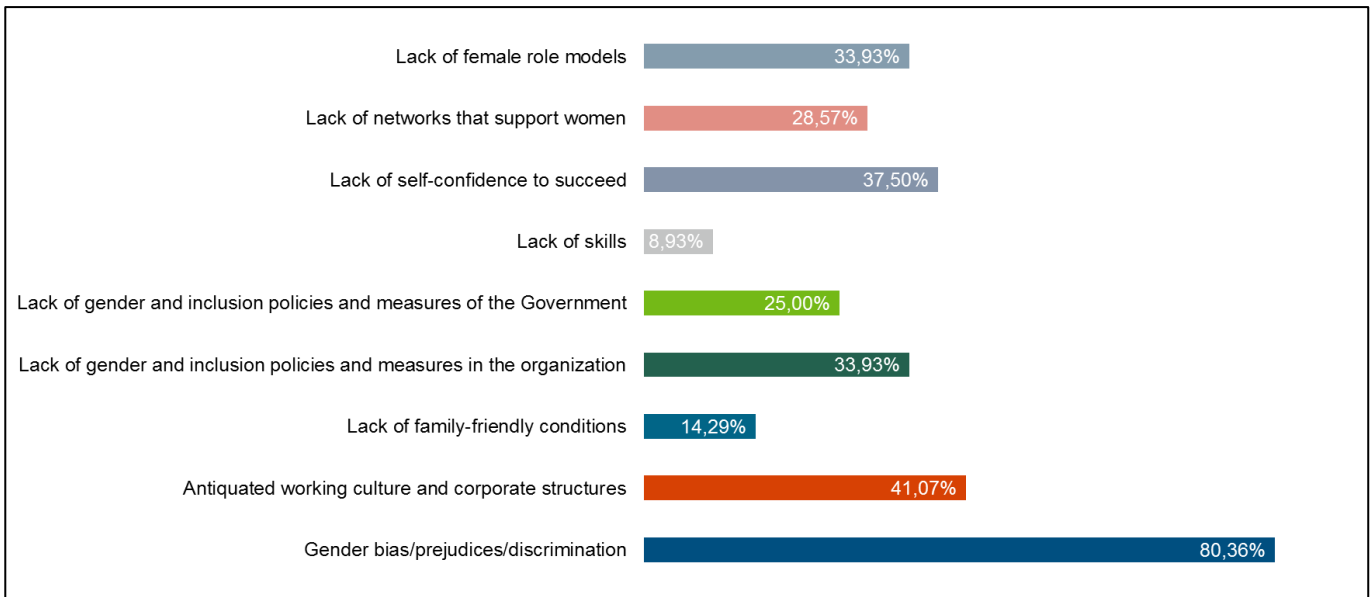
Do you think women are underrepresented in leadership positions in the energy sector in your country?



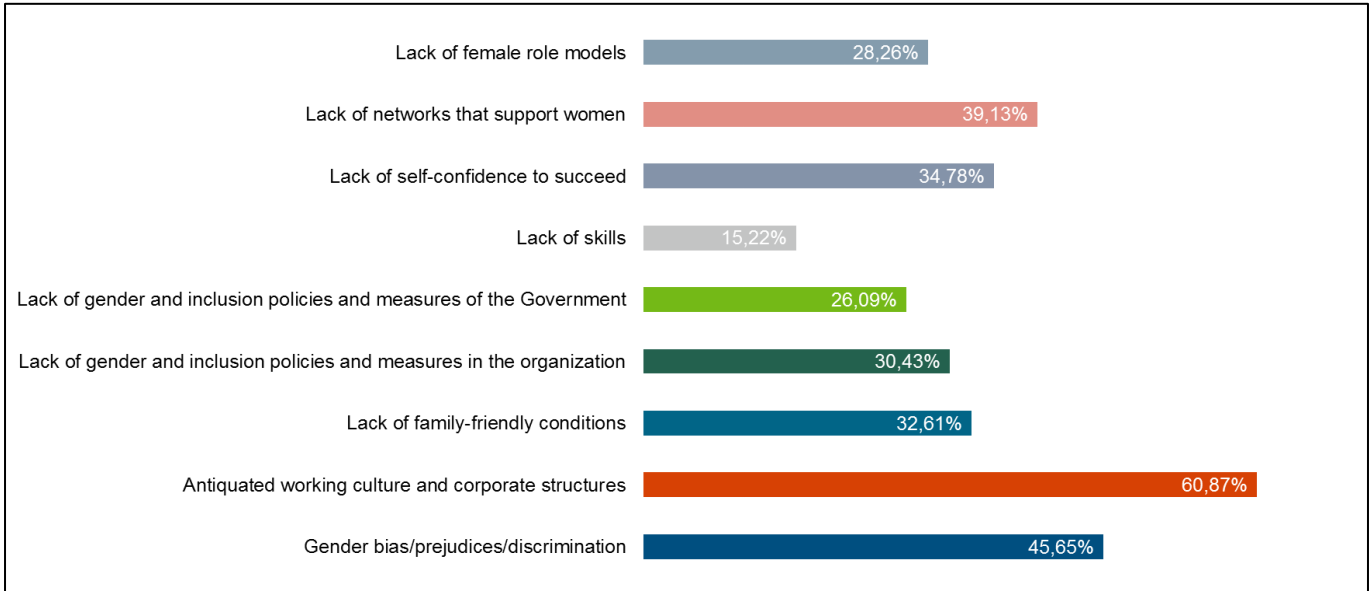
Do you perceive that women face barriers when entering or pursuing career opportunities in the energy sector?



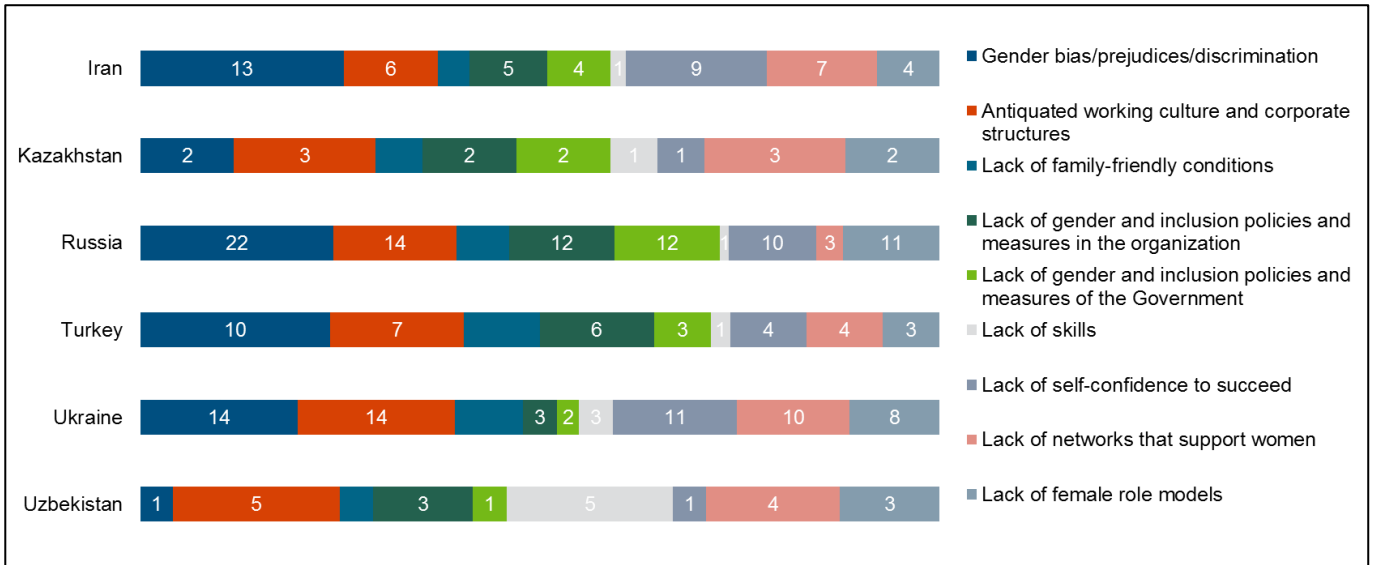
If yes, which kind of barriers do you perceive to be most relevant? (Choose max. 4)



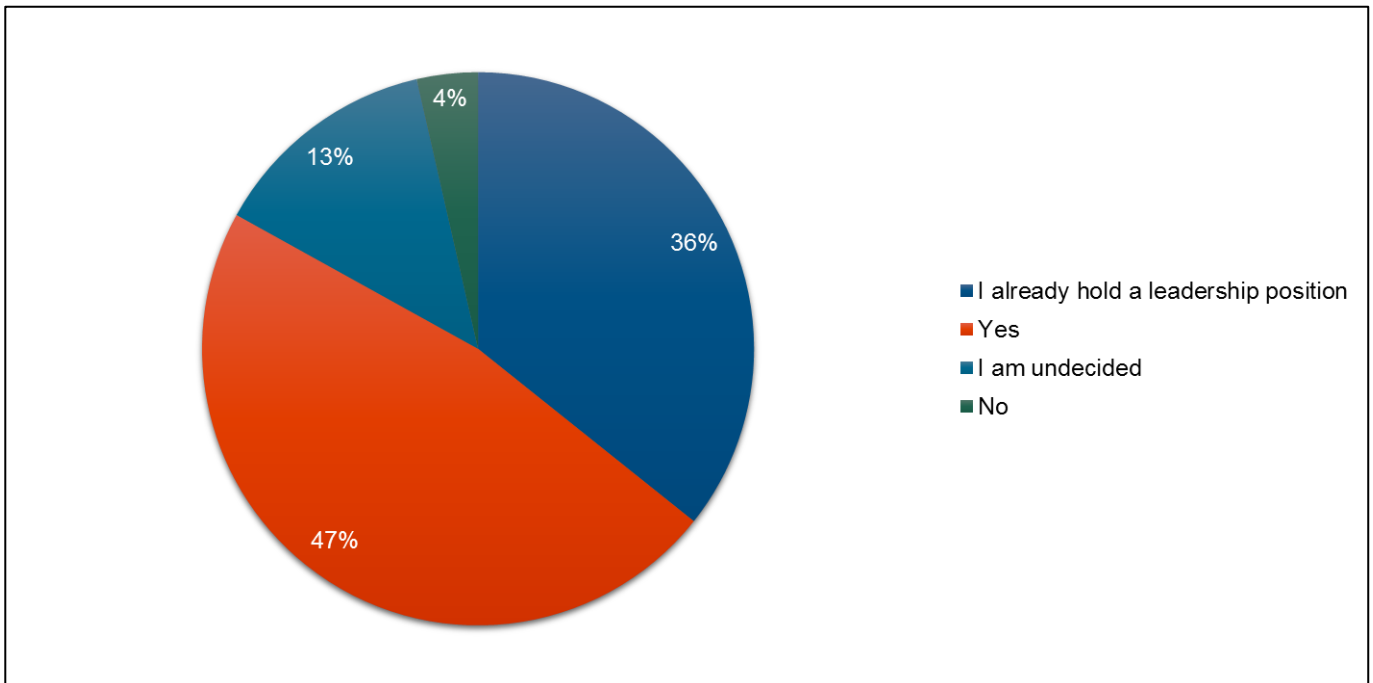
If partly, which kind of barriers do you perceive to be most relevant? (Choose max. 4)



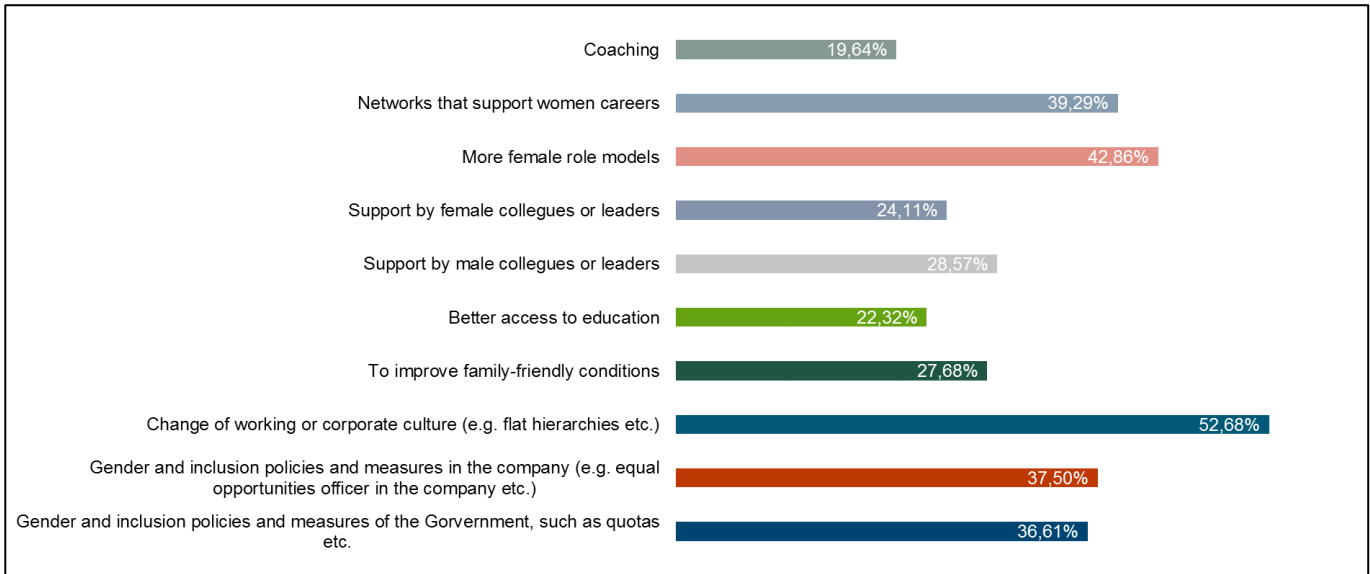
Which kind of barriers do you perceive to be most relevant?(absolute numbers, filtered by country)



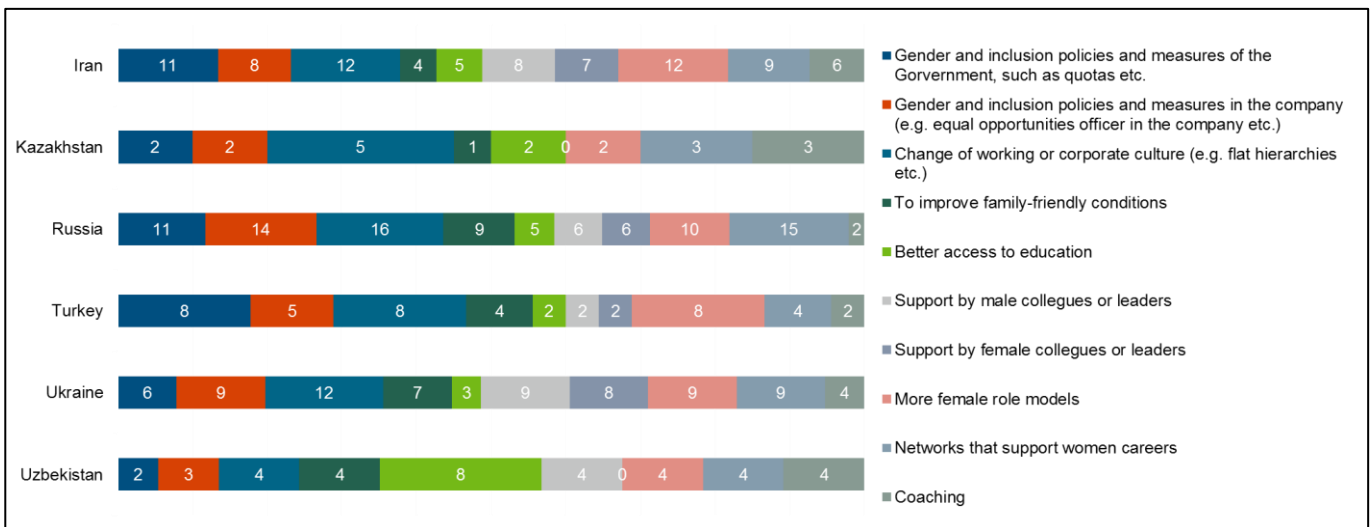
Do you intend to pursue a leadership position at some point in your profession?



What do you think are policies and solutions to improve gender diversity in the energy sector in your country? (choose max. 4)



What do you think are policies and solutions to improve gender diversity in the energy sector in your country? (absolute numbers, filtered by country)



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