

20 years Chernobyl

Women active against nuclear energy - from rage to visions



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Preamble

On April 26, 1986, in block IV of the nuclear power plant in Chernobyl, in the former Soviet Union, an explosion led to a maximum credible accident (MCA). Nuclear safety experts had previously stated that this could happen only once in 10,000 years. All of us who were around at the time of this MCA, have memories and associations with this date, which we can never forget.

I remember that sticky evening, when the first thunder-storm after the nuclear catastrophe broke, we were celebrating the 40th birthday of a friend of mine. On our way back home the heavy rain started. Arriving at home, we discussed what to do with our sodden umbrellas and clothes: how could we decontaminate them? We finally threw them away. Hysteria? Maybe, but that is how it was at the time.

Uncertainty and rage about an information policy, which 'left those out in the rain' - in the truest sense of the word - those who cared for future generations. Out of this rage a movement evolved, which wasn't expected by anybody. It was primarily women who had been active in the anti-nuclear movement prior to Chernobyl who were organising the protests. They came from or were heavily involved in the peace movement. It was particularly mothers who organised themselves in a multitude of groups of 'mothers against nuclear power' to jointly enforce their demands. One of our authors told us that long periods of her family life took place while demonstrating against nuclear power plants or reprocessing plants in the streets, at hoardings, or at construction sites. Chernobyl significantly shaped the lives of a whole generation of women.

Still today, it is women the world over, who argue more strongly against nuclear energy use than men. One of the reasons is that high risk technologies will never be completely controllable. Chernobyl taught us that technical deficiencies, human failure, and at present also terrorist attacks, may lead to a catastrophe of unforeseeable dimensions. But did we learn from the catastrophe? That's one of the questions we try to explore in this brochure.

The basis of the brochure is a book we published in German in which nearly 30 authors narrated how their experiences 20 years ago changed their lives; how not only the nuclear catastrophe, but also the involvement in a political movement, impacted on their plans, their political activities, their career decisions. A small sample of the articles have now been published in English in this brochure. We chose not only to look at the memories of the activists in Germany and the affected areas in the Ukraine, Belarus, and Russia, but also at arguments against nuclear energy, and the views of people in Europe and Finland, the country in which currently the first European nuclear power plant after Chernobyl is under construction.

We hope this brochure will give the required strength to all those who lived through the events of 20 years ago. We hope that those who were either too young or not yet born in 1986 will gain some understanding of what happened and how their mothers and grandmothers engaged for their future. And finally we hope this publication will bring deserving attention to the activities of women against nuclear energy. We would be happy, if, for example, the renewable energy industry would acknowledge that they also owe their rise in prominence to strong anti-nuclear attitudes of women. There are many opportunities to give recognition to these - not only during annual commemorations.

We would like to thank all those who contributed to the brochure or who supported the production, namely WECF in supporting the communication with MAMA86 and giving the the right to reprint the article by Milya Kabirova. Our special thanks we would like to express to the translators, Edward Alaszewski, Hilary Myska, and Sophie Turner from 'Translations for Progress,' who did the work voluntarily. Without their excellent support we would not have been able to publish the brochure.

Ulrike Röhr, [genanet](#) - focal point gender, environment, sustainability
April 2006

Heike Sabel

Jelena B., 49 years old

Kashmar. Nightmare. Jelena is always saying that word. Then her eyes fill with tears, her stare pierces the wall and goes off into infinity. Before the pain takes hold of her, she pulls herself together. Jelena is a serious woman. Life has made her that way.

She woke up very early this Saturday morning. She had a headache, so for breakfast she only had a cup of strong coffee and an aspirin. Then she had a 40 kilometre journey by bus and metro. She had to walk the last part due to a fire in the metro. And that is everything for me to hear her story. She hungrily eats her aspic and slurps her hot coffee. With no introduction she starts to talk about what happened to her during those days in 1986, at the end of April and the beginning of May. That period of time when Chernobyl changed the futures of so many people.

At that time Jelena worked at Pripjat, the town with the nuclear reactor. She was a departmental manager. Until her son was born she had made a number of work-related trips to towns in the region with nuclear reactors. That's how she came to Pripjat too. "A beautiful town, comfortable, green, a pleasant climate.....lots of people liked living there." Jelena's face shows no emotion. It is as though she is speaking about somebody other than herself.

She was up late on the 26th April 1986. She heard a couple of bangs, then a noise that sounded like a lot of approaching tanks. Her son was spending the night at a friend's house. At about 4 o'clock a neighbour knocked on her door. "There must have been an catastrophe." He knew no more. His mother in law worked in the telegraph office and was ventured to suggest that something terrible had happened.

The next morning everyone wanted to find out what had happened. Every time Jelena tried to use the telephone it was as though the lines had been cut. Otherwise everything was just like a normal Saturday. Children went to school, women went shopping, men walked their dogs. By mid-morning it was unseasonably warm. In spite of this the central heating was going full bore. Lots of locals were in their gardens due to the warm weather, either working or sunning themselves. The usual programs were on the television. Nobody knew anything about the workers in hospital with severe burns.

Jelena's husband climbed onto the roof of their 16 story block with a pair of binoculars. He could not believe that the reactor, which was only 2 kilometres from their flat, had exploded. After all he saw the bulky concrete walls with his own eyes. Then he spotted the hole in the top of the reactor. Jelena and her husband immediately knew what happened. It was midday. They only wanted to do one thing – flee to her mother's 400 kilometres away. But no buses or trains were running. And there were police everywhere. "Don't panic. Await further instructions" they said. Wait! Jelena saw all the people with no idea what was happening. Wait! While the radioactivity penetrated every nook and cranny. Jelena knew too much to be able to wait quietly. Far too late, iodine tablets were distributed. And they were only for children, as there weren't enough for the adults as well. They were supposed to drink vodka. Lots of people did, too. So ended this "Day After", with most people not knowing what had happened.

At 3 o'clock Jelena's phone rang. It was a friend of hers, who had a friend in the KGB, the secret service. One should have the most important documents ready to hand. But nothing was official. Jelena could not sleep anymore that night. The next morning employees from the housing office came around. Everyone had to pack up drinking water, provisions and comfortable clothing for three days. They would be sleeping in tents for a few nights. Nothing was said about the accident. Anyone who asked questions was told "you'll all be back soon."

It was about 1.30pm when a radio announcer, in a sad and strained voice, broadcast that everyone had to turn off the electricity and be waiting in front of their houses by 2pm. "It was as though there was a war on" says Jelena. Kashmar. Nightmare. 2 ½ hours they were waiting on the road. 300 busses are wheeling the town. „Later on we found out that they have been available one day before.“ But they were waiting for the accordant order from Moscow. For Jelena it is more than a nightmare. It is a crime. Jelena's face shows what the journey was like. It is sharp, hard and her eyes are lifeless. She keeps looking at me as though to ask if I believe everything. For example, the scenes at the bus station, 30 kilometres from Pripjat.

Suddenly they were left alone. Everybody screamed. The buses were overloaded. They demanded money for the continuation of the journey – and food was thrown away so that more people could be squeezed on to the buses. How Jelena managed to get to her mother's, she no longer knows. She stayed there for ten days. Then it became known that radioactive rain came down in the village too. It is to be evacuated.



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Jelena and her family kept on moving. Wherever they went, they were treated like leper. They were given clothes that either didn't fit or were shabby. The family was lost, mail was lost. At the end of June in Kiev they came to know that they could never go back to Pripyat. Jelena foresaw everything. "I have a brain to think with." She could only think of how to proceed.

They were allowed back into their houses for two hours to get their valuables. Before Jelena could put anything into a bag, the radiation level had to be measured. Anything too high had to be left behind. For example, her son's drawings. Back in Kiev, Jelena's family had an important decision to make. Where would they live in the future? There were three regions to choose from. Each of them had nuclear power plants or was planning for. Jelena and her husband were professionals. They must not get lost for the country. How ironic! They decided for their native land, Belarus. 40 kilometres from the capital, Minsk, a new power plant was supposed to be built. They were promised work and a flat. But when they arrived, it hadn't been finished yet. It was quite new, but dirty and, apart from a couple of iron beds, empty. For the first eight weeks two families lived together here. The children slept in the beds, the adults on the floor. On the first night, her son, who was not yet six years old, said: "Finally we have a roof over our heads." Jelena can still today see the thankful look in his eyes. Mother and son still live in this flat today. The father, Jelena's husband, died from a heart attack in March

1997. As a consequence of Chernobyl, as a number of doctors confirmed to Jelena. Her son is also ill. An irregular heartbeat. He is an only child. Originally she hoped for two or three. But after Chernobyl she decided against it. What would become of the child? The uncertainty put her off. Jelena regards as selfish women who get children just to strengthen her organism and to get a flat. Instead of buying vitamins for her children, they spend their money for buying new clothes. "If you give a child the gift of life, then you have to want to keep them alive." Jelena's opinion doesn't allow contradiction. She starts to get upset. Red spots appear on her pale face. All at once she has to make an effort to keep her hands still. The ignorance of people who don't understand the seriousness of the situation annoys her the most. In order to do something about this, she travels around trying to educate people. She speaks about politics, the situation in the country, Chernobyl and the coherences. Her region, for example, is built on peat. Every time there is a fire, and that is often, harmful gases are released into the atmosphere. However, the people are frightened to speak up and lose their jobs. "That's how politics is in our country". Kashmar. Nightmare.

The ecological problems after Chernobyl sharpened Jelena's political opinions. She considers politicians responsible for a lot of what happened. But everyone is also responsible for themselves. Therefore she explains to people how dangerous smoking and drinking are, how important healthy nutrition is. There are almost 300 families in her residential area. She has visited most on a number of occasions. "But it never changes anything." Particularly they are laughing at Jelena's "magic potions." But when their children are sick they seek her advice.

Sometimes Jelena is shocked by how barbarous people can be. She thinks about her work, which she has given up for now. At the beginning everyone was interested in this "Victim of Chernobyl." But over the years this has turned jealousy and hatred. Jelena spends many nights wondering why. She has found the answer. "In former times just about everyone was taught that they were part of a collective, but the truth is completely different. Everybody cares for her-/ himself only." At this point Jelena escapes to the garden. The others can laugh. She will do what she can. And accept the consequences. "I want to live in the forest with nothing but a candle, no atomic power. Because I've been through that." Jelena held my hand for a long time at the end. Her face had a touch of warmth and a cautious, awkward smile. "I often feel alone. It does me good to talk about all of this."

Translated by Edward Alaszewski

Kristin Mühlenhardt-Jentz

20 Years after Chernobyl – 20 Years of Living with Chernobyl Attempt at a Summary ¹

Today I am 60 years old. So at the time of the nuclear disaster at Chernobyl I was already 40 years of age and had an eight-year old daughter and a three-year old son. Burned indelibly on my memory is the moment I found out about the reactor's explosion in the news. It was a wonderful spring day, a Sunday morning, and we had spread out happily in the garden, our senses receptive, and listened to random music playing from a radio. There was an interruption in the music, and feeling as if a bullet had struck me, I heard the dryly recounted news of the nuclear disaster in Chernobyl.

Looking back on it now, I know that this event cut my life, and my story, into two. Since then, there has been my life before Chernobyl, and my life after.

At the time I thought and felt at once, "Now it really has happened", as though I had always known deep down that it would. That perception had always existed and now it shot through me like a sharp physical pain which I experienced as a racing simultaneity of agonising images and thoughts, depressing sadness and a panicking fear.

Now I call it a key event in the same way that it evidently affected so many people when they first heard the news.

Such a complex and intensely experienced event cannot be forgotten and only suppressed with great difficulty, because it affects one's whole being and imparts a deeper knowledge of one's own connection with life, which is normally ignored in the routines and the would-be necessities of everyday life.

When I try to describe that experience now, I can only refer to one memory, which over the years has become more the memory of a memory. Maybe it has now become a memory once removed, but which to this day still reflects the impact of the experience, and which is intertwined with all the knowledge that I have gained as a result of the experience. This, in turn, is linked to a stronger awareness of the hidden agendas, the information contexts and the power struggle of the wire pullers of nuclear energy use.

Problematic as it may be, since Chernobyl, I cannot and will not hide this knowledge, which

theoretically is anyone's if they want it. I have now given up wanting to convert people at all costs; I discuss for reasons of the economics of my energy to the point of exhaustion only with those whom I consider open enough to accept the illuminating arguments against nuclear technology, or those whom I care about. But for 20 years now I have made no secret of my conviction, not even when touching on the subject seems to shock others as though I had broken some kind taboo. Astonishingly, there were and still are groups of people who exercise a certain submission to authority along with distinct economic fears or self-interest which obviously leads to a withdrawal from the nuclear question and puts, in its place, a decision to trust in the pro-nuclear experts or in God. And it is a bitter realisation gained from experience and from historical retrospective that this type of people will exist for a long time to come.

My life since Chernobyl has been marked by almost continuous awareness of the daily global nuclear threat posed simultaneously by civil and by military nuclear activity. This includes the ever-growing nuclear waste dumps with no safe terminal storage which will continue to radiate for millennia. (Again, this is public knowledge that everyone in our media society should be aware of). The impossibility of ignoring this madness has led me to dedicate a substantial part of my life – along with my similarly-minded co-fighters – to the political struggle, at times driven but sometimes less so, against the continued national and Europe-wide nuclear course and for a change in energy use.

It was predominantly women and mothers who had experienced the Chernobyl key event and who had spontaneously joined forces in different ways. They recognised and joined each other, because they wanted to turn their devastation, their feelings of powerlessness and their shock into politically effective joint protest. In this manner, their subjective experiences were objectified. This simultaneity in protesting felt so strong that those affected hoped to publicly unmask the political decision-makers and, with their own will and courage, to encourage the closure of nuclear reactors.



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From my current perspective, I am amazed at how unbelievably naive and yet solemn we appeared, we grown women, mothers, linked through a similar sensibility and our shared dream of the immediate closure of all nuclear reactors. In retrospect I am not ashamed of it, even if these days I might have chosen different words for my message than I did at the time.

Rather, I feel moved by our limitless willingness to expose our feelings, because we assumed that this was the most likely way of reaching those who still did not understand. That was the way it was. But I am also amazed at our courage in openly expressing our emotions, our worries and our fears. I am amazed at

our courage in expressing our outrage at the ignorance and lies of the politicians who were in charge, in denouncing their lack of responsibility, their stupidity and their lack of conscience, their questionable interests and their cover-ups.

We were remarkably creative, communicative and keen to learn, in hoping to provoke a political change: I now re-read the public speeches from two decades ago held at events, on market squares, in front of churches, in pubs or restaurants or in Wackersdorf. Or the scripts of our theatre performances, in which we staged a shadow play to impart our thoughts and impressions, intermingled with factual information regarding the dangers of nuclear radiation and contrasting with the affirmations of some grey politician claiming: "There is no need to panic!" I remember the shared, made-up song that we sang outdoors to the tune of "There's a hole in the bucket" (a German children's song) with HTR (high temperature reactor) masks covering our faces. This was supposed to demonstrate the hopeless interchange between the propagandists of nuclear energy use and ourselves, the reluctant citizens. We sang, "There's a hole in the system, dear citizens, dear citizens..." and then we continued: "There's a hole in the reactor, Mr Baxter, Mr Baxter..." etc. Towards the end of the song we spoke of stuffing the hole in the reactor with cabbage... "But if the cabbage blows up, imagine dear experts...because the pressure's too high, then who will lead us?"

We composed poems, wrote, sang, held solemn vigils, spoke to councils, spoke to people at information desks, handed out flyers, made large banners and wrote meaningful phrases on them such as: "Those who do not remember the past are condemned to re-live it". We still use this message when we protest outside the Lorenz church in Nuremberg every year on the 26th April, the anniversary of the disaster. Wearing protective suits, we rolled nuclear waste bins into the town council courtyard and demanded that they be temporarily stored in the prison for lack of suitable terminal storage. Dressed up to look like a metres long atomic worm we wandered through the Christmas market in Nuremberg. We collected funds for the victims of Chernobyl and organized events on current nuclear issues with "our" experts; and we staged fundraising concerts and spectacular protest events at the times of the national nuclear forums in Nuremberg. We stuck posters on trees and walls. We drove to the annual national anti-nuclear energy reunions, where we discussed and presented our own knowledge. For years we taught courses in the Nuremberger education centre under the title of "From consternation must come resistance". In these classes we read and analysed texts which we regarded as important in our further resistance work. In a side room, a paid assistant looked after the participants' young children so that we had the freedom of uninterrupted collective thought. I remember these times particularly fondly, because we often succeeded in

achieving free exchange of thoughts in this concentrated atmosphere.

Many of the chosen texts opened up a perspective that was critical of the patriarchy, and over time we championed the theory that women, and mothers in particular, had a stronger relationship to life than men, and that it was the technocratic thoughts and actions of men that had led to the events in Bhopal, Seveso and Chernobyl. Our desire to change such technocratic behaviours and the fact that women, especially mothers who worried about their children and about the future, became active against nuclear energy all over the country seemed to prove this theory. After all, one could follow the patriarchal trail of blood and destruction back through the centuries. Why did men not protest as loudly and as publicly as we did? Why did men react more feebly, differently to the mothers? Were they by definition more submissive to authority, less courageous, less emotional; did they have different receptors than we women?

But the prominent and sensitive, robust and dignified male figure exceptions such as Günther Anders, H.E. Richter, or Robert Jungk publicly supported us in this times and encouraged us. They demonstrated in their speeches and writings that it was possible to change the erroneous thinking and the limited sensitivity of men by the aid of the mothers and women who were becoming politically active. They suggested that male megalomania and obsessions with feasibility could be halted. Some firmly resistant feminists asked themselves sceptically whether we were once again to become nothing more than their "rubble women".

We studied the "male system" and somehow understood more and more, or so we believed in the meantime.

As far as I can tell, feminist discussion regarding this topic has developed since then. Yes, it is true that western patriarchy had hierarchically ordered the sexes, and that human characteristics were segmented and allocated to the male or female sex, and was valued by society as better or worse. Yes, men were the dominators who controlled, subordinated and conquered; yes, they had definite power, and they wanted to use their knowledge of nature to take control of it and to make nature subject to them.

It is helpful to know this so that dubious patriarchal and culturally oversubscribed viewpoints can be questioned fearlessly and a change of values can be demanded. But from whichever way you look at it – an establishment of the female and the male was intended and led to and still leads to numerous misunderstandings amongst women as well as between women and men. The example of the notorious "Mother-manifesto of the Green Party" towards the end of the 80s and the resulting endless discussions between mothers and so-called career women still shows the divisions and misunderstandings that developed as a result.

Similarly, "Mothers against Nuclear Energy" was aggressively accused of creating a new type of "motherly cult"; therefore the term "mother" which has had negative connotations since the Third Reich, had to be avoided as it divided women. But we stubborn women happened to be mothers, and as mothers had exchanged thoughts on how to master our poisoned daily lives with our children after Chernobyl and on how to become politically active despite and because of our children. We did not want to question this connection. In particular, we wanted the consciously chosen name to be seen as a call to action. We wanted other mothers to feel affected by our name, and to feel encouraged by our strength not to remain stuck in private, apolitical lives. Even they



were to engage themselves responsibly for a worthwhile future for their children and to go out onto the streets and the squares with us.

Wanting to protect one's children at times of threat is certainly an important driving force of mothers (and fathers) which cannot be ignored. That is my – non-biological! – point of view, even today.

With a challenging perspective, that looks at men's and women's socio-cultural and psycho-social development through history, we women can encourage a new kind of life-related thought. We can disclaim presumptions to consider ourselves as better human beings. We can call on men and encourage them to appropriate those provident characteristics and their related thought processes that allow us all to survive. However, men would have to understand and be prepared to learn long-term that holding onto certain types of constructed masculinity that are based on control and superiority cannot be appropriate in trying to stop destructive technocratic developments.

And we women could contribute to a new gender hierarchy by encouraging quick-witted men in this direction, by calling on their support and by continuing to widen the horizon of our actions without power obsessions and to see each other as politically active.

Over the years the group of active women began to fall disintegrate. Many women had gone back to

their careers after raising their children; some could simply no longer deal with the issue of the nuclear threat over such a long period of time. Perhaps some of them became bored by the weekly meetings, or they could no longer fit them into their busy everyday lives, and some possibly no longer found our work promising. However, many of our earlier co-fighters still encourage us to continue. To this day they attend our large events and pickets and they remain members of the "Mothers against Nuclear Power" organisation.

We of course allowed the others to move on.



Time and again we realise that we can work just as efficiently in a smaller social group. Gradually, we are also more economical with our energy: we meet up less often and are more focussed, we still go to demonstrations, congresses and symposia, organise information events with champions of anti-nuclear power and energy change scenes, and we collect signatures for European withdrawal from nuclear energy. Thanks to the internet we have for some years now been able to broaden our work to include other important groups of the anti-nuclear power. Since then we have also become closer to the Munich branch of "Mothers against Nuclear Power", where we work continuously as part of the management committee. We stay in touch almost daily via email or telephone and discuss joint actions and events. We also work closely with the Nuremberg Power Change Confederation, whose main topics are nuclear power transport and local energy politics. We support each other; we organise and plan many things together. In this way we publicise the change to an independent "green" electricity provider without nuclear power, such as Greenpeace Energy or Schönauer Electricity Rebels, which is easily to achieve. Of course each of us implemented her "personal nuclear power phase out".

Since Chernobyl we have accompanied local, in our view irresponsible nuclear politics (even under the last government) with critical, enlightening events and information and have shown again and again that the use of nuclear energy is not compatible with our fundamental right to the protection of life and to physical inviolability. We have shown too that the path to alternative energy politics through the

development of renewable energy, through more efficient energy use and through energy austerity measures must be made now and that could be done with sufficient political will.

In the current government (red-black coalition) we are faced with the challenge of preventing with all our might revocation of the deal negotiated under the last government to withdraw from nuclear power. We have to uncover and clarify the cavalierly trumpeted deceptions and propaganda lies of the nuclear industry and of the politicians linked to this industry.

Sometimes people ask me with shock: "Oh, do you still exist?", or: "Why do you still exist?" as though people consider the nuclear problem as having been dealt with by the last coalition government.

At moments like this I remind myself again of the reason for our actions. If in the meantime many clearly consider us strange, then that can only mean that many of those citizens who were affected by Chernobyl have now become comfortable in forgetting and avoiding the issue.

After Chernobyl we took up this fight for a nuclear free future: like Sisyphus, we keep on rolling the boulder uphill, without ever seeing an end within our lifetime. Or will we? Who will continue our work? What consequence will a new generation have on anti-nuclear resistance? Can a withdrawal of the so-called peaceful use of nuclear energy even be realised, as long as the greatest powers from east to west threaten to enforce their interests, if need be, with atomic weapons? Does a second Chernobyl have to occur in order to lead to a change in conscience? Or could mankind suddenly be inspired and finally grasp the obvious advantages of alternative energy politics? These are questions which we ask over and over again, without ever receiving a definite answer.

Looking to the future, we will have to continue to roll the boulder up the hill.

As I look back over the years, this public fight for clean electricity and against nuclear electricity was also an inner struggle.

Over and over again I asked myself and we asked ourselves: how worthwhile is it even to continue? How much am I neglecting that might be more important, that might be more fulfilling, make my life more balanced, make me happier? How much am I missing in life – professionally, privately? Why am I still doing this work? Am I not clinging on to a utopia that has long failed? Am I fooling myself, do I just want to feel important, do I overestimate what I can barely even do? Won't the end be the way that the powerful want it to be, no matter what the minority of us do about it? Can we still believe that we are speaking for the majority of the population, when public interest in our work has decreased more and more over the years? Have I not been going around in circles for too long now?

This inner struggle also resembles the rolling of

the stone. But I must be brave and keep in sight what Chernobyl must have meant and must still mean for those people living in the region, what unimaginable unhappiness such a catastrophe would cause in a country as highly populated as Germany. And then I still think and feel that I have to do it, we have to do it, simply so that we don't abandon the committed people on our side that fight for all of us on their own. Because if we are to achieve something in our cause, then we will only achieve it collectively, and only then is it bearable, and only then can it even be enjoyable at times.

Sometimes my reflections and doubts bring me to a point when I simply have to ask myself if I want to stand up for and live for my deeper insights, or whether I have an alternative. And then it is completely clear to me: after Chernobyl, I have no alternative.

¹ For the Nuremberg group "Mothers against Nuclear Power" and for myself

Translated by Sophie Turner



Cornelia Stadler

Brief overview over the „Mothers against Nuclear Power“ (Registered Charity)

Formation and organisational structure

Founded by women in May 1986

Motivation: Nuclear accident at Chernobyl (at that time a part of the Soviet Union) on 26.04.1986

Membership: 95% female; males can also become members

Number of female members: approx. 1,100

Area of activity: Germany, particularly the areas around Munich and Nuremberg

Headquarters: Munich

Management Structure (pursuant to the rules stipulated on 05.03.1988): general meeting once per annum

Executive Committee: three to five chairpersons elected for one year all bestowed with equal rights, one treasurer, two auditors

Contact persons to act as representatives for the regional groups and project groups: to meet three times per year

Office Manager: part-time position

Funding: exclusively from membership contributions; no subsidies

Objectives and measures to achieve these

To *inform* a large proportion of the population about the dangers of using nuclear power by means of the activation and storage of radioactive material

To argue for the *phase-out of nuclear power* by exhausting all legal remedies

To *help* those people in Belarus and the Ukraine affected by the nuclear accident

To have a *clear self-image:* to do political work whilst remaining unpartisan and free of religious bias

Associated persons and groups

The work of the different parts of our membership has been advanced over the last 20 years since the society's formation

Additional networking with regional, national and European anti-nuclear and pro-peace organisations (e.g. Bürger gegen den Atomreaktor Garching¹, IPPNW, Greencity München, Salzburger Plattform gegen Atomgefahren², Atomstopp International, Bund Naturschutz³, amongst others.)

Development of and involvement in public solar power stations in Munich and Bavaria

Overcoming the female gender disadvantage

When we began our activities we often learned that women were considered incompetent when it came to nuclear power, since it was technically regarded as a male area. Doubts were cast upon the credibility of our arguments. Following intensive and detailed examinations of questions concerning nuclear power and its consequences, the female members are able to refute the so-called specialist knowledge of those who support nuclear power.

Our female members have appeared as experts in court hearings (e.g. case against the WAA-Wackersdorf) and discussion forums about health and disaster prevention.

Positive effects of our work

In part, we accredit the empirically substantiated anti-nuclear position of the German public to our efforts of informing people about nuclear power. Environmental results including: decision not to proceed with the planned reprocessing plant in Wackersdorf, hindering the building of new nuclear reactors, success with the increased usage of renewable energy. The comparatively uncritical stance of the public in France and the new EU-member states, where a civilian anti-nuclear movement is absent

Thanks to our long-term support, we were able to improve the lives of children in the Ukraine suffering illnesses or weakened immune systems due to exposure to radiation. Since 1990, donations amounting to 500,000 Euro have been collected to enable the purchase of medical machinery and drugs, which were subsequently transported to Kiev. Further, provisions and other material goods that had been donated were distributed to those Ukrainians who needed them most.

Initiatives towards equality

The spontaneous protest on Mother's Day 1986, only a few days after the maximum credible accident (MCA) at Chernobyl, led to ongoing political action by many of our female members, which included writing letters, sending petitions to politicians, as well as participating in peace rallies, demonstrations and nuclear conferences. Several members are now acting in local and municipal authorities or working actively in Agenda21-groups on site.

Translated by Hilary Myska



¹ Translation: *Citizens against the Nuclear Plant Garching*

² Translation: *Salzburg Platform against Nuclear Hazards*

³ Translation: *Federal Nature Protection*

Ulrike Röhr

Natalia Manzurova, Liquidator in Chernobyl; „We were there when our country needed us“

Natalia Manzurova was one of the liquidators brought together as both volunteers and conscripts from all over the former Soviet Union after the nuclear accident to help with cleanup efforts. There are reports of between 600,000 and one million liquidators in total, most of them were male.

The radio biologist and single mother was deployed in Chernobyl from summer 1987 until Christmas 1991. She had just completed the thesis for her PhD in radio biology when the reactor exploded. Her thesis supervisor was one of the first scientists to be called to the accident site. Within just a few months he had died and she was never able to do the viva. At the time she was in her mid thirties with a young daughter, meaning that she could have declined to go to Chernobyl. In response to my question about why she went anyway, fully aware of the dangers, she explained that there were many reasons. One was that she was qualified precisely for such a situation. "There were not many people with our knowledge. We were needed then to determine what had happened and to decide how much of the contaminated area to close off and how to proceed with the clean-up. These were decisions that could save lives. At the time nobody realised the extent of the destruction or its consequences." Besides the moral obligation there was also a sense of "voluntary compulsion" as Natalia calls it.



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Yet how it was being among thousands of men, whom she had to command and bear responsibility for in addition to everything else, was a entirelyly different question. And the terrible living conditions there... She would prefer not to talk about this.

Her office was in Pripyat, a thriving city that had 50,000 inhabitants at the time. Immediately after the disaster, the Soviet government was above all else preoccupied with keeping the accident hidden from the rest of the world. Thus, when the evacuation of Pripjat began, the reactor had already been burning for one and a half days. Even then, people were merely told that there was a small problem and that they needed to expect the evacuation to last just three days. They left their homes without realising that they would never return.

Her task involved cataloguing and destroying or burying what people had left behind. She confiscated contaminated children's toys, as well as furniture, clothing, books, household appliances, T girders – yes, even entire houses, in order to prevent their former occupants from carrying out the deadly property into the world. It was gruelling and emotionally very strenuous work to dispose of these people's very personal and treasured belongings. She says that every day on their way to work, on the bus, people cried. And in order to forget what they had experienced that day at night, they drank a lot. After a while she was so emotionally numb that she did not even wince when she discovered children's bodies in the abandoned village.

Soon after she had left Chernobyl, the suffering that would make her bed-ridden for three years began. She is still plagued by headaches, extreme tiredness, and her immune system is very weakened. „I can't go out on cold days and I get ill as soon as I come into contact with people that have just a cold even. A normal life is therefore not possible.“ There is a thin scar on her neck, she tells me. This is the „Chernobyl necklace“, as surviving liquidators call it – a sign of a thyroid operation. Many of these liquidators have thyroid diseases or thyroid cancer as a result of their exposure to radioactive iodine. „I have since 'befriended' many of my illnesses, and have made a 'contract'

with them that they will not destroy me too much“, she explains. The situation is probably only bearable with a decent dose of humour. But, she also suffers from depression, not least because she worries about causing too many problems for her loved ones.

„Do you know what a post-traumatic stress disorder is?“, she asks me. „The doctors have come to understand what it is. Many people, who have been exposed to intense or ongoing stress, suffer as a result. You hide all of your memories and feelings deep inside yourself – until you see a particular programme on the television or read an article in the newspaper. Then all the emotions come out from their hiding place and cause you great pain.“ It was especially bad during the first year after she returned from the Chernobyl-zone. People did not understand her and sometimes she was even scorned. Most doctors regarded her illnesses as imaginary and wanted to admit her into a psychiatric ward. One told her that she had „Chernobyl AIDS“.



Aged 42, she was classified an invalid. At the time, she thought her life was over. More than once she contemplated suicide. But, in the end she always got herself together, thanks to psychotropic drugs, a trustworthy female psychiatrist, and a former classmate who taught her yoga. For many years she was unable to speak about Chernobyl. That was until she underwent psychiatric therapy. All that she is describing to me, is still only a small part of what she saw and experienced in Chernobyl. But the fact that she could speak about it at all is apparently a big step forward for her. No one in Russia is interested – everyone is busy trying to get through hard times.

Seven years ago she founded the „Alliance of Chernobyl Invalids“, which she has also since then been. The non-governmental organisation advises Chernobyl liquidators, their widowed wives and their children. I ask her if she is at least well provided for. She answers, „No. We were there when our country needed us, with our hands and our heads. But now that we are sick, nobody cares. Politicians would like to see us dead if they had their choice. But perhaps it is precisely this that keeps us alive – it gives us something to fight for between our attacks of suffering.“ Natalia Manzurova lives off incapacity benefits, an occupational pension and a small supple-

mentary payment for food. In total this works out at 6,300 roubles a month, less than 180 Euros. The financial situation looks equally bleak for all female liquidators, activists and survivors.

Many of their colleagues from this time have already died. The „Alliance of Chernobyl Invalids“ wants to make a documentary about deceased liquidators, and build a memorial for all those people who died as a result of radioactive exposure following accidents and disasters. „It is terrible when people forget their heroes. Young people today have no idea of the profound problems the people who saved them endured. They don't realise that history was written right here in their proximity.“

At the end of our interview Natalia Manzurova emphasises that she would gladly accept invitations to come to Germany or elsewhere, where she can show her films, photographs and of course talk about her experiences. „I don't know how many more years I have left, but I want to tell people about Chernobyl for as long as I live. This is not just my life and my life story, but the history of our entire country.“

This article is based on an interview with Natalia Manzurova, which has been supplemented with information that she sent us. I would like to thank Tatiana Dereviago / Women in Europe for a Common Future (WECF) for her support and her translations of the Russian interview and the additional material

Natalia Manzurova has written a brochure about her work in Chernobyl and the consequences of the nuclear disaster: „Unpleasant duty: the experiences of a woman in Chernobyl“. Unfortunately, this is so far only available in Russian. An English translation is planned as well as subsequent publishing in the United States.

Translated by Hilary Myska

Heike Mahlke

Women of Gorleben [Gorlebenfrauen]



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When the German federal government in 1977 decided to create a national “nuclear waste storage center” in Wendland, in the north-east of Lower Saxony, I knew not much about the dangers of this technology. I became furious by the way and manner how owners of wood- and agricultural lands were seduced by huge sums of money to sell their properties to the nuclear industry. The local politicians were bribed with promises of jobs, enormous gifts of money for investments, travels in Germany and abroad, to agree to the plans of the nuclear industry. People who protested were criminalized. At actions policemen from other regions and later from other federal states were employed. Later, Wendland became a region where telephone calls were tapped and houses were searched as a daily routine. It became clear to me that a technology which divided families and village communities, and which could only be realised by force by the police, could not be good for life.

When women, who took the floor at initial hearings and public meetings, were denied intelligence and full knowledge, I decided to get myself acquainted and, together with other women, to make use of our intelligence, emotions, creativity and courage, with which they did not entrust us. When, in 1979, the first construction activities of the intermediate nuclear waste storage started, women from Wendland for the first time met to protest and they began to call themselves “Gorlebenfrauen” (Women of Gorleben). They were a very mixed group, from youngsters to elder women, from local to city women, from heterosexuals to lesbians. Their actions were numerous, imaginative and creative from the start. Under the slogan, “Women struggle for life”, they planted daffodils in the whole country in autumn 1979 as a preparation for the first international meeting in Wendland, spring 1980. They baffled and irritated the police and the nuclear industry officials again and again.

For many years that was their strength. In the meantime personal life took priority. The pugnacious women educated their children, built their relationships and houses, took professions. They took to the street when they felt they should not keep silent during disastrous or political occasions such as Chernobyl, the Gulf War, asylum lawmaking, Castor transports with highly radioactive waste. Some women

went further, became politically active, went to other organizations. Always there were new faces, especially new generations. The little daughters at the start grew up, and took their places in the Gorleben movement.

If a woman gets an idea, she discusses it with other women and when an action comes out of the idea, each woman asks 10 more women to participate. In this way many women get involved. The Gorleben women carried out many actions in Wendland. They also travelled to other nuclear sites in Germany, Belarus and the Czech Republic. The aim of the Women of Gorleben was to contact other women on other sites and to build an international network of women resistance. In 1997, on the occasion of 20 years’ continuing resistance against nuclear power in Wendland, we organized an international women’s forum against nuclear power. We invited many women from other nuclear sites in Europe. It was the wish from the participants to continue these meetings regularly, in order to reinforce and inform each other. It is clear to us, women in Wendland, that we must struggle together with women in Europe and worldwide, because the nuclear industry also acts globally and is subsidized by many governments, like that of Germany. At the moment we lack the power to connect the women protests. The Castor shipments with high-level nuclear waste to Gorleben and Ahaus during the past three years, which were pushed through with police forces, made us tired. Therefore the women’s protest in Wendland is not visible at present. We only participate in the boycott “Siemens does not come into our houses, until Siemens steps out of nuclear power”. We encourage women to resist in this way and not to buy Siemens products and to tell the Company. That is not a very courageous act, but it has a big impact, when many women protest in this way against the construction of nuclear reactors in which Siemens wants to collaborate or collaborates, in Turkey, Ukraine, Russia, etc.

Resistance from women presupposes strength and lust for life. The women in Wendland experience both during collective planning and realizing actions and when taking a breath after clashes with the police.

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MAMA-86 Ukraine in the eve of 20 anniversary of Chernobyl

How it started

All-Ukrainian environmental public organization MAMA-86 has started in 1990 as young mothers initiative to protect Kyiv's children health from Chernobyl disaster impact. That time Kyiv's population was considered as not suffered from the radiation effects caused by Chernobyl NPP explosion. Mothers have decided to take actions to discover the truth, to make it public and find the way to conduct the protection measures. MAMA-86 started to work at the time when physicians and pediatricians were afraid to talk publicly about their opinion on radiation impacts on children. Privately, they said about Chernobyl AIDS (immune system decline), osteoporosis and thyroid gland disorders. Publicly, they avoided journalists and kept silence. Secret information on diseases for internal use only was a normal part of professional life not only in medicine, but many other areas in the USSR. This pattern disappeared very slowly along the hard process of the democracy building in the independent Ukraine.

Our organization was first registered as Kyiv local NGO in June 1991. It was quite an event for the municipality, because we were the first group of citizens in Kyiv who wanted to be established as the organization without help of any VIP individuals or other, "public official" organizations considered "correct" by State. After two months struggle, with great support of mass-media, we won. The Ukraine Independence Act was adopted 2 months later. The law on public organizations and political parties was adopted by the Parliament of Independent Ukraine 1 year later.

First initiatives of MAMA-86 created the ground for long-term work on civil society building, protection of citizens environmental rights, improvement of public knowledge on health and environment issues, lobbying for better policy and legislation and implementing practical solutions for most alarming problems. Working with Chernobyl issue in early 90-th we gradually moved from the consequences problems to the cause. Besides the weaknesses of political and governmental system before the disintegration of the Soviet Empire, one very important factor played a crucial role for health and well-being of Kyivers immediately after the disaster: silence and lie of the officials about real situation. Instead of giving



instructions to inhabitants on adequate behaviour after the disaster, the Minister of Health Mr. Romanenko kept convincing people via TV and radio channels that nothing serious happened and no danger appears. Therefore when the radioactive wind started to blow through Kyiv, hundreds of thousands of Kyivers walked around the city together with their children and enjoyed unusually long 1st May holidays until the 4th. Children of the top-government were evacuated from Kyiv before that date. Many further tragedies could be avoided if the government would take precaution against radiation sources or its early effects GIVING INFORMATION IN TIME. The Chernobyl disaster and cynical violence of people's right to know was the last drop ruined putrid soviet system. It also caused the foundation of the Green movement in Ukraine, the first wave of civil society birth here.

15 years of work: An overview

First we worked mainly in Kyiv, but since 1993 started networking with groups and activists all over Ukraine. About that time we started discovering Internet and huge global environmental movement. Since 1994 we cooperate with WECF and until now we are very good partners with many practical achievements and results benefiting people and the environment. Recent joint work on rural sustainable development in Ukraine is aimed to improving local drinking water supply and ecosanitation practice development as a part of organic agriculture. Our organization is a member of WECF, ANPED, Eco-Forum. NOVIB is our long-term partner. In 2001 MAMA-86 has registered its

network within a Ministry of Justice of Ukraine with All-Ukrainian status. Today we unite 17 regional organizations with central office in the capital of Ukraine. In 2005, we have celebrated 15th anniversary.

Members of our organization are public leaders, experts in different areas of MAMA-86 work: ecologists, chemists, economists, architects, teachers, physicians. They are mainly women, because MAMA-86 mission is to strengthen social and educational role of women-mother in the society for improving the quality of life of Ukrainians. Our main Governing body is General meeting of the members. The goal of our work is establishing socio-environmental conditions for Ukraine's transition to sustainable development.

The core-directions of our work today are the environmental democracy building, reaching equal access of everybody to water and sanitation, helping to sustain chemicals management and promoting sustainable production and consumption pattern. Health and environment issues are cross-cutting and being addressed via focused core-campaigns.

For achieving our goal, MAMA-86 Ukraine conducts informing and raising awareness activities, runs education work, prepares and implements public consultations and lobbying actions to improve state policy and legislation on environmental issues, carries out pilot projects on technical solutions, which demonstrate the effectiveness of sustainable approach. We also prepare and disseminate statements, positions and demands to the Government on alarming issues involving press. There are several examples below on what and how we are doing.



In 1997, during our regular summer seminar, all regional leaders agreed that the drinking water quality is a most alarming health and environment issue and the matter of serious concern of people everywhere in Ukraine. We have started Drinking water in Ukraine campaign from the research into the existing situation. After multistakeholder discussion, the general picture was drawn and the network of experts and interested representatives of NGOs, business and Government was established. Our Eco-telephone help-line working in 11 cities and towns in Ukraine started to give specialized advises to respondents on drinking water safety and quality issues. First publication

communicated our findings to wider public and mass-media. Due to support of NOVIB we have planned and implemented several pilot projects on the alternative purification methods based on equipment designed and produced in Ukraine. The pilots were also devoted to demonstrate economic effects of saving water by implementing individual water meters in multi-apartments buildings. Big pilot project in Sebastopol infectious diseases hospital helped to repair water supply, sanitation and heating network. It was co-funded by the local government of Sebastopol. This reconstruction resulted in reducing the risk of infectious diseases outbreaks in Sebastopol, but also lowering the water use in more than 3 times. In 1999, Ukrainian government started to work on the draft law "On Drinking water and water supply". With MATRA support MAMA-86 conducted the research on correspondent legislation and used its conclusions for preparing the NGO position on the draft law content in 2000. The comments, editions and additions were collected and discussed by 22 organisations from 11 cities and towns of Ukraine at the Public hearing with participation of the government representatives in charge. The outcomes were summarized and submitted to the Government. 45 changes and amendments proposed by MAMA-86 were included into the final law text. Most important among them is a guarantee for the right of citizens to initiate and conduct public hearing on drinking water and drinking water supply.

In 1999, MAMA-86 has created the precedent of conducting public consultations on National policy and plans in Ukraine. In partnership with "Ecopravo" NGO network and "Bakhmat" environment and culture center we carried out 5 regional and one national consultations to discuss National Environment and Health Action Plan. With experts involvement, two chapters "Informing of the population, medical-environmental education and raising awareness" and "Public participation" were drafted. Extended comments to the chapters "Radiation safety", "Water quality", "Food products", "Wastes", "Fuel and energy complex", "Implementation mechanism" were prepared as well. Public consultations resulted into 700 proposals and comments. More than a half of it was incorporated into the final official text. The report about this work was presented at the Third Pan-European Ministerial Conference on Environment and Health (1999, London). For its results MAMA-86 has obtained a letter of appreciation from the Director of WHO Regional office for Europe. With more than 50 NGOs support, the successful lobbying on the NEHAP adoption by the Cabinet of Ministers of Ukraine was done and the Plan was adopted in 2000.

Anna Golubovska-Onisimova with baby Liza speaking at the hearings in Kharkiv



Project "Kyiv 2003" aimed on providing opportunities for Ukrainian people to influence the Pan-European environmental policy elaboration process. Fifth Ministerial Conference "Environment for Europe" took place on 21-23 May 2003 in Kyiv bringing together Ministers of Environment from Europe, Caucasus and Central Asia, representatives from the United States of America, Canada and numerous international organisations. Since 2001 within the framework of preparation to the conference, MAMA-86 in cooperation with Ukrainian and UK partners involved general public to discuss a Conference Agenda and draft documents, raised public awareness on European and North Eurasian problems. 56 local and regional NGO have participated in the project implementation thus taking part in the "Environment for Europe" process, what was especially important for the communities and public groups, which did not have much organisational capacity and access to modern information and communication technologies.

After the Orange revolution, which changed Ukraine's future to better, we have decided to conduct a Green revolution. In 2005, together with the Earth Day Network, MAMA-86 has organized huge raising awareness public event in the center of Kyiv dedicated to municipal wastes management problem. Exhibition, thematic entertainment activities, distribution of leaflets and big concert with participation of rock stars, sport Olympic champions, government and NGO speakers and famous DJ as MC - these events during the day were visited by up to 200,000 Kyivers and guests. The garbage separation and collection by friendly business company was organized for demonstration purposes. The wastes were separately collected during the event in 18 containers: 9 kg of plastics - 100 kg of mineral oil was preserved, 67 kg of waste paper - 245 kg of timber or 8 trees of 10-20 years age were preserved, 65 kg of glass - 300 KW of electric energy is preserved. This information was simultaneously communicated by the MC from the stage to the auditorium. The event was held under the slogan "The Orange should have green leaves".

Chernobyl catastrophe and energy future

'MAMA' in our name means that mothers are mandated by Nature to take care about future generations, therefore mothers are natural agents of sustainable path of development. '86' in our name means the year, after which the world would never be the same, because so many people on a Globe maybe first time understood clearly at once how awful and long-distance could be the consequences of technogenic catastrophe. That year and beyond, following gradual disclosure of information, many nations questioned nuclear reactors as a safe source of energy. Today, when the climate change is recognized as a rapidly progressing global threat, more and more politicians say that nuclear is the solution.

2006 is a 20-years anniversary of Chernobyl

catastrophe. We should reconsider its consequences and lessons. It seems being forgotten if the Ukrainian Government plans to build new 11 reactors as a core of energy system to be established according to the draft Energy Strategy of Ukraine till 2030. At the same time, the European Parliament considers the nuclear energy as a solution not only to climate change, but also to dependence on imported fuel.

The UN Chernobyl Forum forces us to forget about the Chernobyl disaster on the eve of its 20th anniversary. The IAEA/WHO report "Chornobyl's Legacy: Health, Environmental and Socio-Economic Impacts" released on 5th September in Vienna questions catastrophic impacts of radiation exposure on the current generation and generations to come. Its conclusions are ridiculous, moreover, they are hardly adequate as there are many facts on health effects, which the WHO experts group's study failed to account for. The report assessments contradict even to the general official Ukrainian statistics. For example, official Ukrainian data suggests that by January 1, 2005, in Ukraine only, the number of people with status of the Chernobyl disaster victims reached 2,646,106 persons, while the report estimates suggest 600 thousand persons overall. The Ministry of Labour and Social Policy of Ukraine reports that there are 17,448 families in the country ALREADY have lost breadwinners (death cases) due to Chernobyl disaster. At the same time, WHO gives different figures: 59 deaths (including 9 children) and 3,940 potential future deaths. The Chernobyl disaster still remains the heaviest nuclear catastrophe in the human history. To our opinion, this report was aimed to eliminate the major obstacle for further development of nuclear power - post-Chernobyl fear of possible fatal consequences. Pro-nuclear lobby would prefer to promote the nuclear power industry without public outcry, although the industry is inadequately expensive, hazardous and obsolete. It is absolutely natural that the International Atomic Energy Agency (IAEA) uses WHO *to hide the real scale of the disaster* as the both agencies belong to the UN system and bounded by mutual agreement on information concordance.

Nuclear plans of the Ukrainian Government and IAEA Report catalyzed UNEXAMPLED since early 90th



process of Green NGO Movement consolidation in Ukraine¹. The public ecological organizations from different regions of Ukraine were making a protest "No - to atomic reactors, Yes - to energy saving" on the 5th of October 2005 from 10 till 12 at the Cabinet of Ministers.

Activists of National Ecological Center of Ukraine, Voice of Nature, Ecoclub, Mama-86, Green World, Bachmat have spoken out against government plans to built 11 new nuclear reactors till the year 2030. Participants of the picket were standing in front of Cabinet of Ministers with slogans: "No to new reactors!", "Did you ask us?", "Nuclear Power Stations - ALT-F4", "I want to give a birth to a healthy child!", "Dniprodzerzhinsk - 42 mln. tons of rare radioactive wastes in hundreds meters from the Dniپر river", "Chernobyl.net.ua", "Energy-saving - source of energy!". Traditional drums accompaniment drew attention to the drums stickers, which symbolized radioactive wastes. The requirements the participants of the action presented in the appeal to Prime Minister of Ukraine Yuriy Ehanurov, were conveyed to representatives of the Cabinet of Ministers.

The main points of protest of public organizations were their disagreement with nuclear future of Ukraine and rough violation by the government of the Aarhus Convention, that guarantees the right of public to take part on the early stages in decision making concerning building and taking out of service objects of atomic energy.

Ecologists are not against strategic goals of Ukraine to receive energetic independence but call nuclear energy even more dependent because of its high price (it will be necessary to take foreign credits), potential danger for the health of people that is already known by Ukrainians, absence of management infrastructure to handle radioactive wastes and spent radioactive fuel wastes in the country etc.

Organizers of the action required reconsidering of developed draft strategy of fossil-fuel complex, taking into account their recommendations, including proposition of active implementation of energy-saving technologies in all economic sectors, governmental



MAMA-86 slogans "NPP Alt-F4", "MAMA-86 - for sustainable energy".

support of alternative energy sources development, and carrying out energy audit in industrial and municipal sectors to analyze energy loses and to find ways for its reduction and gradual fazing out of service nuclear power complex.

Ecologists think that for stabilization of situation in energy sector, it is necessary first of all to reduce energy loses in industrial and municipal sectors. These loses constitute 50% of the overall for today.

Following Green movement consolidation tendency, most powerful national and regional environmental NGOs won by joint efforts 5 minutes speech at the First Presidential Hearing "Challenges born by freedom". The NGO Statement prepared for President of Ukraine Mr. Yuschenko was aimed to the prioritization of the environmental policy in the development strategy of Ukraine and urgent need of the environmental integration into all economic sectors. The honour to speak in front of the President was committed by the NGO delegation to MAMA-86 representative.

"If the Orange is real, it must have a green leaves", the speech was ended. It was broadcasted by major national TV channels. President invited environmental NGOs to submit proposals on implementation of our demands. We have established the Working group on preparation of these proposals, and in the end of December, the draft President Decree with substantiations was produced by environmental NGO WG and submitted to the President Secretariat. Our proposals were also included into summary demands of NGOs belonging to the Organizing Committee of the Presidential Hearings. Celebrating its 15th anniversary on December 22, 2005, MAMA-86 has organised NGO round-table on discussing the platform of action on the prioritisation of the environmental policy before the election. The resolution is establishing joint vision on how and what NGOs should make its influence. We have also organised the press-conference in the main national news agency, the leaders of main national and regional NGOs participated in it. Causes of environmental crisis in Ukraine, weak political, institutional, information capacity of the environmental government, most urgent problems and actions needed were discussed and covered by mass-media.

Recent gas crisis made up the mind of the Ukrainian Government concerning the potential of energy saving and energy efficiency demand. However, it didn't cause the reassessment of nuclear plans. Rather opposite, the necessity to build closed nuclear fuel cycle was stated as the energy independence solution. The EU thinks the same way. What should we do?

Earth Day Network has started 3-years climate change campaign during which it will oppose the nuclear power as the solution. Celebrating 20th

anniversary of Chernobyl, MAMA-86 together with NGO members of antinuclear coalition - National Ecological Center of Ukraine, Voice of Nature, Ecoclub, Green World, Bachmat and others - will organize mass Earth Day event in Kyiv on April 22, 2006 dedicated to sustainable energy strategy as only solution to climate change in remembrance of Chernobyl.

Next day, April 23, big International Conference ***Chornobyl+20 Remembrance for the Future*** will start. It is being organised by Heinrich Böll Stiftung (Berlin), Ecoclub (Rivne, Ukraine), The Greens/EFA in the European Parliament, the Nuclear Information and Resource Service (Washington, DC), the World Information Service on Energy (Amsterdam), IPPNW (Germany) and Bündnis 90/DIE GRÜNEN (Germany), who are inviting independent scientists, environmentalists, non-governmental organizations and sustainable energy experts from all over the world on April 23-25. The conference will focus on three areas: First, the ongoing catastrophe of Chornobyl and its continuing consequences, including the release of a new study which reviews and analyzes the recently published report of the IAEA and WHO; second, the continuing safety, economic, proliferation and other problems posed by nuclear power generally; and third, the development of a roadmap to a sustainable energy future. It is the aim of the conference to bring analysts and activists and a broad public audience together for a new examination of the 1986 Chornobyl accident's continuing health, social and economic consequences and to draw new attention to the promise and need to implement sustainable energy technologies. MAMA-86 is preparing to take active part in the conference. You could find more information at <http://www.ch20.org/>

¹ Not includes a Green Party of Ukraine, which currently does not cooperate with Green NGO movement while represents itself publicly as its leader.

Women in action:



Mothers against Nuclear Power, demonstration



Blockade of the tracks for the transport of nuclear waste near Gorleben

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... promoting renewable energy



One of the „Mothers against Nuclear“ with her granddaughter presenting a solar cooker

The training group „Solar technicians“ at LIFE - Women develop Eco-Techniques

fighting against nuclear ...



Rally in Munich: Nuclear energy: Mothers, say NO! Cheap Nuclear Energy? No residual risk for our children



On the occasion of the elections for the German Bundestag 2005. You have the choice: Sun - Wind - Water - Biomass



Ulrike Röhr

Women Against Nuclear Power Data, Facts and Arguments

Many articles in the book provide very personal and insightful accounts of women's experiences of the Chernobyl nuclear disaster and/or of their resistance to the use of nuclear power. In this article women's connection – or non-connection – with energy production, energy politics and energy planning will be presented by means of so-called "hard" data and facts. Though not exclusively, I will take a particular look at women's significantly greater opposition to the use of nuclear power and reasons for this. At the same time, there will be a short insight into "gender relations" as regards renewable energy, thereby bringing together the first and third chapters of the book.

Women and energy – a difficult relationship?

"Energy" is traditionally and largely a "male issue" (Röhr 2001). I wrote this some years ago in a background paper that was addressing the issue of "Women and Energy in Industrialised Countries". But, today I ask myself whether this really is the case? Did I already have an inner censor that forged me to look at only those areas that are dominated by men – one would probably call that a self-fulfilling prophecy. Put another way, is the perspective one takes not more decisive? Viewed from the angle of "who decides, who plans, who earns", then the definition of energy being a "male issue" is certainly true. However, if I change the perspective and direct the attention to the side effects of such energy production and usage (catastrophes such as Chernobyl, as well as natural disasters caused by climate changes due to increased CO₂ emissions resulting from energy production) the situation already looks very different. The articles in this book provide evocative attestations thereof.

Women against nuclear power: research results from different regions of the world

During the 1970s, the fight against nuclear power formed the basis of the female environmental movement in industrialised countries. This reached peaked in the 1980s. Even though things have quietened down somewhat in many of the women's and mother's groups, fundamental rejection of nuclear power remains, not just in Germany, but all over the world. One of the first pieces of research to reveal gender-differences preferences for energy provision came from the United States. The research was based

on the assumption that women would tend to prefer the "soft path" (solar power, wind power, bioenergy, hydropower), as this is a more environmentally responsible approach that better takes into account the needs of present and future generations. On the contrary, men would be more likely to choose the "hard path" (nuclear power, coal and oil) because of their tendency to want to rule over and control nature (Longstreath et.al. 1989).

The results confirm this hypothesis of women's considerably stronger rejection of nuclear power. Even with the same level of knowledge about nuclear power, women still perceive it as being less safe. The (desire for) economic advantages of nuclear power played a more significant role amongst men. The explanation offered by the authors is the different socialisation of men and women as regards security and perception of risk (see below).

We find similar results from two Korean surveys from 1995 and 1997 in which women's lack of knowledge about nuclear power is cited as a reason for their rejection of nuclear power (Lee/Lee 1999).

Surveys from Finland also show comparable results. In 1999 only 14 per cent of women, compared with 46 per cent of men, supported long-term use of nuclear power. These figures are also indicating a downward trend: in 1997 the figures were 20 per cent for women and 49 per cent for men. However, the Korean argument, that lack of education is responsible for the differences between the sexes, is proved wrong. In Finland at least researchers found exactly the opposite: the more educated women are, the more vehement their negative attitudes towards nuclear power. In fact, men's positive perceptions of nuclear power grow with a higher level of education. (Kärkkäinen 2001)

Finland is the first country in the European Union that will construct a new nuclear power plant following the Chernobyl disaster. For this reason, there have been numerous public opinion polls. These show that even in a country where the level of equality between men and women regularly takes one of the top positions in world-wide comparisons, there is a significant disparity between men and women as regards support or rejection of nuclear power. However, unfortunately they also show that the level of equality is clearly no guarantee that the opinion of

the majority of the population, that of women, will prevail. Ulla Klötzer argues in an article published in 1999, that when “women fight for equal status in political and business life, this very often leads them to adopt male ways of thinking and acting. Equality is thus no real equality but women getting into power by supporting typical male values. Emancipation is not only about equal salary for equal work and doing the dishes in turn. Real emancipation is when society is steered by an equal portion of male and female values.” (original text in English) (Wise 1999)

The results of the 2003 surveys show, for example, that 28 per cent of women and 62 per cent of men support the construction of a fifth nuclear power plant, whilst 48 per cent of women and 21 per cent of men reject it. Meanwhile 24 per cent of women and 17 per cent of men remain undecided (FINENERGY 2003). There being a higher share of women tending to be “undecided” is a phenomenon to be found in all energy surveys.

A Scottish study about nuclear waste, for example, illustrates a very alarming level of ignorance. Although 71 per cent of those interviewed regard nuclear waste as a big problem, 66 per cent feel quite or very unfamiliar with the issue, with a mere 30 per cent feeling quite or very familiar with it. Of those who consider themselves to be quite or very familiar, 35 per cent are men, but only 26 per cent are women. The lack of information is even higher amongst the younger generation: only 17 per cent of the 18-24 year-olds consider themselves to be quite familiar with the nuclear waste issue. That means that women and also younger people urgently require information. (Rodger 2003)

A mere 25 per cent of all citizens in the European Union consider themselves to be well-informed about nuclear waste. Again, it is women and young people who are particularly poorly informed. (European Commission 2005)

Whether these gender differences as regards information really exist, or whether they are more connected to gender roles and identities cannot be evaluated at this stage. A possible explanation could be that it is not real existing knowledge and understanding, but rather the male identity which makes them feel much more comfortable with technical issues. Thus, it would not fit with their gender role identity to admit lack of knowledge. The situation is quite the reverse amongst women who have from childhood been told that technology is a “man’s world” and that girls/women do not have a clue about such things. Supporting evidence of this comes from the aforementioned Eurobarometer poll concerning nuclear waste. It becomes apparent that men feel more able to answer many of the questions, but that they are also more likely to give incorrect answers. A further reason for the gender differences could be the way in which information about energy, nuclear waste, etc. is communicated. Whom is it addressing, either intentionally or unintentionally? To

whom does the kind of language, terminology and pictures used appeal?

Back to the results: the only surveys that determined positive attitudes amongst the population towards nuclear power were done by the nuclear industry itself and closely related organisations. The NEI (Nuclear Energy Institute, USA) e.g. ascertained that there is a growing consensus towards the use of nuclear power in the USA. Although these surveys also reveal a “gender gap”, the overall level of support is very high: 78 per cent of men and 62 per cent of women regard nuclear power in a positive light. (NEI 2005)

But, there is also the opposite side to the anti-nuclear attitudes of women. WIN (Women in Nuclear) is a fast growing international network of women, who work within the nuclear sector and have made it their purpose to inform women about the merits of nuclear technology. On the occasion of their annual meeting in Finland in 1998, they stated that women’s greatest concerns over nuclear power were nuclear waste and effects on health, in particular fears about cancer (WIN 1998). They wish to confront these fears by means of information campaigns, with which they want to enlighten women about the advantages of nuclear technology. In their report of the meeting they write that one must bear in mind that an industry tycoon, assured by the security of nuclear power, and a woman, worried about breast cancer, each have one vote in elections. Needless to say, WIN presumably wishes that this were different.

Male and female attitudes towards nuclear power in Germany

In autumn 2005 the Germans elected a new government. During her election campaign the current (female) Chancellor promised the nuclear industry a “phase-out of the phase-out of nuclear power”. During the coalition-talks this topic was bitterly disputed, but without finding a consensus it is fixed in the coalition agreement that a phase-out of nuclear power will remain as it is. But in spite of this agreement there is an ongoing heated debate about an extension of the operational periods of the nuclear power plants. Against this background rather a lot of polls were and have been conducted about public opinion towards nuclear power and the phasing out of nuclear power.

In the summer of 2005, the social research institute Emnid ascertained, on behalf of Greenpeace, that 46 per cent of men, but only 22 per cent of women are calling for a delay of the phase-out, and vote against the restriction of the operational periods or even for an extension of nuclear power plants. A clear majority of the population, 52 per cent of men and 68 per cent of women, wants to speed up the nuclear phase-out, or at least wants to maintain the pace of the process. There are corresponding differences concerning the question about whether the nuclear phase-out is considered right or wrong. It is

also conspicuous that for all questions “don’t know” answers are predominantly given by women (for the question concerning the phase-out this answer was given by 2 per cent of men and 10 per cent of women and for the question concerning the extension of the operational periods of the nuclear plants this answer was given by 7 and 14 per cent respectively). This level of insecurity is also twice as great amongst women concerning the question about a nuclear power plant being built near one’s home (within 10km), yet the overall figures regarding this question are very low (1 and 2 per cent respectively). 86 per cent of the women, but also 62 per cent of men, would not accept the construction of a nuclear power plant near their home. This means that a large proportion of those who are pro-nuclear, would not want to have a plant in their proximity (this is known as the “not in my backyard” syndrome). A mere 8 percent of women, but a considerable 27 per cent of men, would accept a nuclear power plant in the proximity of their home.

In this survey, 44 per cent of men and 24 per cent of women welcome the construction of a nuclear repository in Gorleben. This is opposed by 48 per cent of men and 67 per cent of women.

When asked about the greatest environmental problems in a survey also carried out by Emnid on behalf of Greenpeace, 68 per cent of women and 45 per cent of men named nuclear power as being the greatest problem. In this context, almost half of the women (46 per cent), but only a quarter of the men (26 per cent) worry that nuclear power plants could become potential terrorist targets. (Greenpeace Magazine 2005)

Women’s opposition to nuclear power plants is shown in a survey about reasons for changing one’s

energy provider. The participants of the survey were customers of the electric power distributor in Schöna (EWS), which only sells electricity derived from renewable sources. The main reasons given by women for changing energy providers were their opposition to nuclear power and information about other methods of energy production. (EWS 2005)

Male and female risk perception

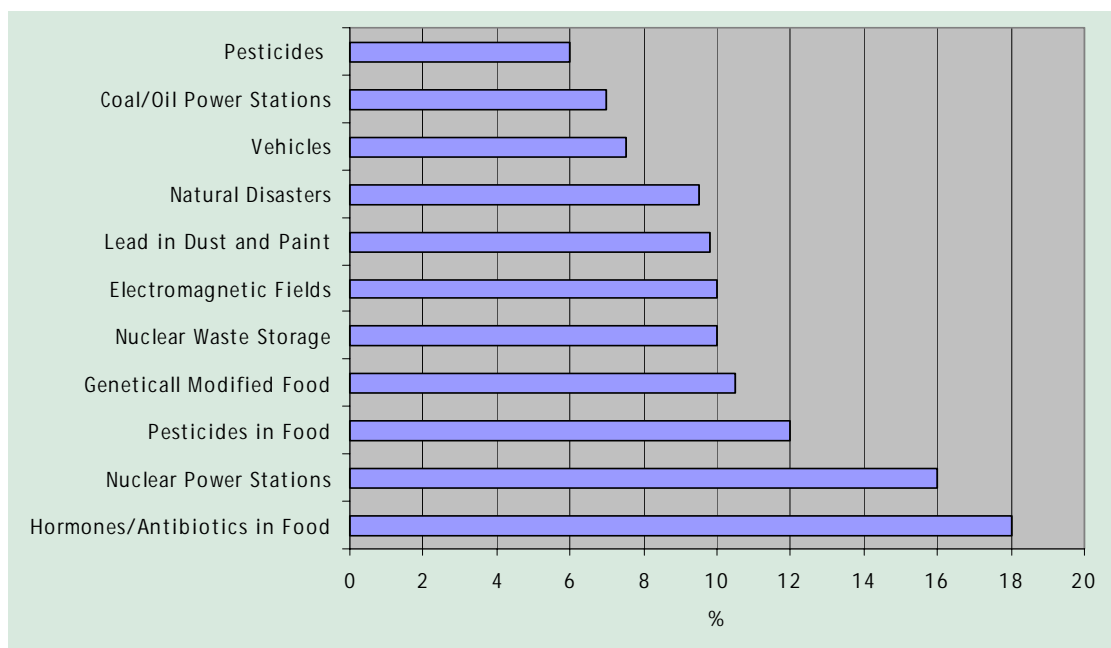
How can one explain the generally large differences between men and women’s attitudes towards nuclear power, which arise independently of women’s status in society, the region they live in, or their level of education?

There are three significant, and closely interrelated factors that each play a decisive role. Firstly, there are differences in men and women’s risk perception. Secondly, women’s greater health consciousness, as well as their care and protection for the next generation, have to be taken into account. And thirdly, the impacts of possible risks in daily life and care work, as experienced in the aftermath of the nuclear disaster of Chernobyl, and described in this book, differ according to gender.

Whilst scientific experts *evaluate* potential risk, risks are *perceived* by “ordinary” citizens. Evaluation proceeds by means of defined methods and is, at least according to the experts themselves, objective, rational and value-free. By contrast, the public’s perceptions of risk are based on subjective feelings, knowledge and attitudes. That said, the following deals solely with perceptions of risk.

Men and women’s different risk perception is confirmed by a whole series of studies from various parts of the world. The following diagram shows the

Gender differences in risk perception (Finucane 2000)



Percentages: Proportion of women who responded with „risk“ or „high risk“, minus the proportion of „risk“ and „high risk“ answers from men

results of an US-study and illustrates by how many more percent women perceive something (health-related) as being risky in comparison to men.

For around 17 per cent more women nuclear power plants present a high risk. The difference is 10 per cent as regards nuclear waste storage.

Studies about environmental awareness in Germany and Europe confirm the facts: risks of nuclear waste storage (European Commission 2005), and the possibility that nuclear power plants could become targets for terrorist attacks (Greenpeace Magazine 2005), are perceived as being much higher by women than by men.

For a long time, only women's socialisation, as well as their health consciousness (derived from caring for family and children, in particular), were taken into consideration as reasons for these differences. Increasingly, however, a connection is made between people's risk perception and their level of influence over decision-making and/or the control they wield over risks. The theory: the lower the ability to influence decisions, the higher the sensibility for risk. Since very much fewer women than men do have access to wielding power and influencing decision-making, this would, at least in part, explain the big differences.

This theory was confirmed by a secondary analysis of the quoted risk perception study from the United States, based on ethnicity, gender, income and education. Thereby it was possible to show that white men have by far the lowest risk perception, that white women and black men are at around the same level (which distinctly counters the theory of female socialisation), whilst black women show the highest levels of risk perception. These perception levels roughly mirror the social and cultural statuses of the groups analysed: the lower their status, the higher their perception of risk. The data of the white men was further analysed. The result: it was primarily the roughly 30 per cent of men who were highly educated, with high incomes and in senior (management) positions, who demonstrated extremely low levels of risk consciousness. This thereby pushed the results of the whole group „white men“ towards a marginal level of risk awareness. But, this is precisely the same group of men who are responsible for political and economic decisions, including the use of risk technologies. Whether this can be used to turn the argument on its head, meaning that if women were to hold more power their perception of risk would shrink, is doubtful. The close link between their risk perception, their health awareness and provision and care for the coming generation, militate against this argument.

Yet the repeatedly stated assumption, that women's fear of risks is connected to the fact that they are less qualified in science and technology does not apply: investigations of risk perception amongst occupational groups of physicists, toxicologists and chemists show that the differences between men and

women's risk-assessment are similarly extensive in their respective areas of expertise (Slovic 1997; Jacobs, Mirham 2003).

Women and renewable energy

If women are so much aware of risk and if they are so decidedly against the use of nuclear power, one could expect that they would engage themselves as vehemently in alternative energy production, i.e. in renewable energy sources. This was the case at the height of the fight against nuclear power, in particular during the aftermath of the Chernobyl nuclear disaster. The use of renewable energy was still in its infancy. Rosemarie RübSamen asked herself in an article whether once alternative energy had grown up, women had only been of use in the nursery, in other words during its infancy stage. (RübSamen 1994)

In the meantime, renewable energy has outgrown its alternative niche and has become an important part of the economy, not to be dismissed. More up-to-date information from the renewable energy sector shows that the proportion of women engaged here is not (or no longer?) much higher than within conventional energy sectors. The total figure is about 20 per cent, but this also includes the administrative employment areas traditionally filled by women. As regards the technical areas, the figure is 6 per cent. Management positions within the energy sector are traditionally almost exclusively held by men this is not much different within the renewable energy sector. Individual exceptions confirm the rule. (cf. genanet 2005)

Outlook and conclusions

The battle for the phase-out of nuclear power continues. Women must continue to raise their voice and add weight to it by means of creative actions. At the same time they should not miss the boat on getting involved in renewable energy. It is here that the jobs of the future are developing - renewable energies account for a growing sector of the economy. But, those women who are not drawn by technical jobs also have choices for action. Because of the liberalisation of the energy market we do have freedom of choice concerning whom we buy our electricity from and how it is generated. That means that every person can make their own decision about whether they want to consume energy from nuclear or renewable sources. However, the possibility of exerting such preference, and therefore also influence energy production, is still not being taken advantage of very much in Germany. Information about how the electricity of the energy providers is generated (renewables, coal, nuclear&) is available on the internet, as well as on demand from the providers themselves. Lack of information is therefore no excuse.

It is widely acknowledged that women have less money at their disposal than men. But, even this does not justify the use of the only ostensibly cheaper nuclear power. Consequential costs are passed over

onto society, and far worse, onto future generations. Furthermore, the price differences are only small, thus the consumption of 'clean' energy would not seriously burden household budgets.

This means there is really no reason not to get involved. What are we waiting for?

Translated by Hilary Myska

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Hiltrud Breyer

Has Europe learned any lessons from Chernobyl?

Twenty years ago the dangers and devastating consequences of nuclear power were shown for the entire world to see by the Chernobyl nuclear disaster. Countless women and their families were directly or indirectly affected. In part, the impact of Chernobyl has become even more manifest twenty years later. The Ukraine has registered 100,000 people as having been affected by Chernobyl, in comparison to the 2,000 cases recorded in 1990. In Belarus, the Ukraine and Russia at least 3 million children have had to be treated on account of the disaster. It will not be until 2016 at the earliest that the exact number of children who have suffered serious diseases will be known. At the same time, there has been a dramatic reduction in the birth rate in these areas.

Europe-wide phase out of nuclear power

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The realities about the risks and vulnerability of nuclear plants were brought home to many citizens, but also many policy-makers, by Chernobyl and the terrorist attacks of 9-11. For many states this marked a comprehensive turning-point in energy policy. Nowadays, the majority of European countries have decided to do without nuclear power or have committed themselves to the phase out. The former red-green coalition Government in Germany introduced a fundamental turnaround and agreed to the phase out. And this decision cannot be compromised! Belgium, the country that has the highest proportion of nuclear power per capita, will also be backing out. Following public opinion polls, Austria (1978) and Italy (1987) completely phased out their nuclear energy programmes. On a global scale nuclear power is even less significant with a mere 2-3 per cent of final energy being generated by nuclear power. This figure is far behind those for other energy sources: oil (40 per cent), coal (26 per cent) and natural gas (24 per cent). Despite insufficient advancement even renewable energy sources hold a share of 6 per cent.

Deadly Risk Technology

However, Europe is certainly not free of risk. There are still 149 reactors in operation, the majority of them in Western Europe (nine out of ten of all European reactors). The amount of radioactive waste grows by thousands of tonnes every year and the present generation is already burdened by 100,000 tonnes of

it. France is the black sheep of Western Europe, producing 45 per cent of all nuclear power in Europe with its 59 reactors. But the public primarily takes notice of the nuclear plants in Eastern Europe because of insufficient security measures. The following new EU member states are focused on nuclear power: Czech Republic, Hungary, Lithuania, Slovakia and Slovenia. Of these, Lithuania is the leader, sourcing 80 per cent of its energy from nuclear reactors! The security issue is unresolved, as the countries are not required to adopt any security standards as part of their accession. However, the fact that there is a plan for the decommissioning of the Chernobyl-type reactors can be construed as a positive development.



Radioactive pollution of the environment resulting from civilian nuclear power and nuclear power programmes causes millions of cases of disease and death all over the world, particularly cancer. The chain of scandals, cover-ups and accidents in the nuclear power industry is boundless. The ongoing frivolous handling of this "dinosaur technology" is more than alarming. Even the simple view calls for action: every trader, be it a take-away restaurant or a decorating business, is only able to operate with a trading certificate, which is granted by the authorities once fire safety and waste regulations have been satisfied, something that is not required for the most dangerous kind of all industrial activities in the world.

More and more female citizens have recognised this. A representative Eurobarometer poll in 2002 established that for more than 50 per cent, the concern over nuclear disasters is the number one

environmental problem. In a Eurobarometer poll from September 2005 the majority of those interviewed spoke out against nuclear power. Even if the issue of how to deal with nuclear waste did not exist, 60 per cent would still oppose nuclear power.

Euratom – No thank you

Euratom was established in 1957 with the purpose of assisting the development of nuclear power. And this, the European Commission's obsolete treaty, still serves as a smoke screen for countless privileges for the nuclear power industry as regards research, loans and the energy market. Despite the call from the European Parliament, for Euratom to expire in 2007, the Commission continues to hold on. The Greens in the European Parliament are pushing for the termination of this treaty as it is totally outdated! A big majority of the population and most EU member states now oppose nuclear power on the basis of the associated risks.

The European Parliament's position as a supervisory and legal body will as usual be undermined, since the decision about the approval of the EURATOM budget is made by the Council of Ministers, not the Parliament. Nuclear power is also being unfairly and indefinitely advantaged. This not only goes against fair competition within the otherwise liberalised internal energy market, but also stands in the way of a forward-looking climate and environmental policy.

The conflict between the advancement of nuclear power and the control of risks has never been solved. On the contrary, there are huge shortfalls in security. The European Court of Auditors already came to the devastating conclusion in 1998 that more than 996 million Euros, which were allegedly used for security improvements at nuclear power plants in Eastern Europe, had largely disappeared without having had much effect. Moreover, Commission Directorates are apparently not able to monitor measures satisfactorily or deal with problems quickly. Locking up this ageing and dangerous technology slows down the breakthrough of renewable energy and energy efficiency.

Research funds for nuclear power almost twice as high as those for renewable energy

The European Commission continues to keep in place the privileges for nuclear power in its proposed 7th Framework Programme (FP7) for 2007-2013. It is an outrage, that the resources in the area of Euratom research are to increase by 230 per cent – it appears that sustainable energy supply is to be systematically phased out!

FP7 is to date the biggest research and development programme as regards the number of countries, the length and the total budget. The planned Euratom funds currently amount to 4.8 billion Euros for seven years. Between 2002 and 2006 1.23 billion Euros have already flowed into nuclear research, with 700 million Euros thereof going towards research into nuclear fusion, a technology associated with incalculable risks.

The nuclear technology sector has received more than half of all research and development funds in the OECD states. By the end of the 7th Framework Programme more than 50 per cent of energy and nuclear development funds are to be allocated to research into nuclear fusion. The privileges being granted to this kind of technology are not justified since they will not be available for commercial use for at least 30 years. The funds therefore need to be cut and instead invested in the development of renewable energy.

“No” to transportation of nuclear waste through the EU and to Eastern Europe

EU Commission plans for a deal to save the nuclear industry are currently no longer being considered. However, there are some very irresponsible ideas about the disposal of nuclear waste. For example, there is talk of easing the transport of radioactive waste, primarily by ship, to Eastern Europe, mainly Russia and the Ukraine. We cannot allow our unresolved waste disposal issues to be transposed onto Eastern Europe. The associated risks for third countries involved in the export of nuclear waste, such as illegal circulation or the release of radioactivity into the environment, are being ignored. The responsibility for nuclear waste cannot be passed over onto others. The Greens in the European Parliament will show a red card to these plans!

The enormous risks of the growing transport of plutonium in Europe were examined in a study published by WISE Paris in association with Green MEPs. Through France alone, almost 40 tonnes of plutonium are being transported annually over a distance of 250,000 kilometres in 450 loads. This transforms France into a nuclear ghost train. Five kilos of plutonium are enough to make a nuclear bomb. An accident involving just one nuclear load could cause hundreds of cancer-related deaths and lasting radioactive contamination of an area of at least 250 square kilometres.

Nuclear power versus competition

In addition to the immense security and health risks, there is another aspect to nuclear power that threatens us: the wastage of billions of Euros worth of public resource funding. On a European level alone, nuclear power still enjoys frequently concealed privileges in the form of direct and indirect subsidies.

A particular example of the distortion of competition can be found in nuclear plants' tax-free provisions for waste disposal. Alone in Germany and France figures are estimated to lie at 35 billion Euros and 9.6 billion Euros respectively. Whereas each plant in France thereby saves around 127 million Euros, the figure is ten times as high in Germany at around 1.5 billion Euros. Rather than using this money for its intended purpose and putting it into public funds, it is used as tax-free money to be played with on other markets. If the operating companies go into insolvency, the funds that have been lost, and therefore also the resources

for cleaning up nuclear plants and disposing of nuclear waste, are no longer secured. All privileges and special rights granted to the nuclear industry must be abolished and the right to free competition must be applied consistently! There can be no public financing of waste disposal, since this incidentally also stands against the "polluter pays" principle stipulated in the EU Treaties.

Labelling obligation for nuclear power

Fair competition demands comprehensive information and labelling. Consumers need to know where and how the electricity that comes out of their socket was generated. Since 15 December 2005 there has been an obligation to disclose electricity composition by means of labelling, thanks to the efforts of Bündnis 90/Die Grünen. This achievement can have very beneficial results since consumers can make a conscious decision against nuclear power and can, for example, opt for a higher proportion of electricity generated from renewable energy sources. Information and transparency are particularly important for consumers in a liberalised electricity market.

Fair prices for the energy market

The nuclear power industry still does not carry the responsibility for the dangers it creates. It still does not answer for the immense damage it is causing to the environment and people's health. It continues to be massively privileged, by state protection of Castor transports and guaranteed minimum quotas for electricity from nuclear power, for example. The preferential treatment of nuclear power causes a distortion of competition and threatens the safety of Europe's citizens. The phasing out of nuclear power is therefore long overdue.

A new "Chernobyl" every year due to reprocessing

The toxic impact of the nuclear reprocessing plants in Sellafield (Great Britain) and La Hague (France) were long underestimated. Following a study by WISE-Paris that was commissioned by the European Parliament, two ticking time bombs were identified, which could detonate at any time. Even partial damage caused by a plane crash, terrorist attack or fire would cause a disaster on an unprecedented scale, eclipsing even the devastating Chernobyl accident. The 7,500kg of highly radioactive waste generated at La Hague alone contain 280 times as much of the carcinogenic caesium as was set free in Chernobyl. It is estimated that up to 1.5 billion people would die of cancerous diseases in case of an accident in which less than a quarter of this caesium was released.

Yet the side effects on health are enormous even without an accident – the annual emissions correspond to 15.000 times that of a nuclear power plant or the same as a big nuclear accident! Around 80 per cent of the collective radiation from the French nuclear power industry comes from reprocessing. Between 250 and 500 kilograms of deadly plutonium have already

managed to seep into the bed of the Irish Sea. In the areas surrounding Sellafield and La Hague there is a concentration of leukaemia and other forms of blood cancer. The threat is existential. More and more people are calling for the immediate closure of these plants and the end of the financially disastrous so-called "reprocessing".

During the entire 45 year-long existence of the Euratom Treaty, inspectors have only been dispatched once to check La Hague and Sellafield. These are places in which 125 tonnes or 75 per cent of the highly toxic plutonium for civilian use is stored. Five kilos of plutonium would be enough to build a nuclear bomb. It is generally agreed that 530 tonnes of plutonium, 9.8 tonnes of highly enriched uranium and 313,000 tonnes of less enriched uranium should be monitored. The agency in charge of security monitoring, however, which annually receives around 1.5 million messages about radioactive stock, largely relies on information from operating companies. Any lost nuclear material would be hardly noticeable.

Closing down hazardous junk reactors in the East and West

The "high-risk" reactors in Lithuania, the Czech Republic, Hungary, Slovenia and Slovakia, all EU member states, are not merely in part alarmingly similar to the Chernobyl disaster type, but are also suffering particularly threatening shortfalls. The devices of the Temelin nuclear power plant located on the Czech-Austrian border, for example, have considerable faults. The Slovenian nuclear plant lies in an area under serious risk of earthquakes. The reactors at Ignalina (Lithuania) of the same type as Chernobyl are prone to break down and the security risk is as big as ever. But there are also rather "adventurous" reactors in operation in Western Europe. The scandal-ridden company BNFL in England operates the oldest reactors in the world at plants built more than 40 years ago.

Hence the European Commission must finally realise its stated goal of closing down high-risk reactors. Spending on the continued operation of scrap reactors in East and West and the ludicrous development of new nuclear plants must be halted immediately. Instead the EU should push for a new sustainable energy structure. There is a considerable savings potential by merely increasing energy efficiency and modern energy systems in the industrial sectors of the Eastern European accession countries. Transnational energy partnerships (twinning) between ministries, municipal authorities or organisations are a successful model. This would be an important way of significantly improving the economy and the environment.

The future belongs to renewable energy

The development of energy sources has to orientate itself around the challenges of the future. The biggest challenge is climate change. In order to attain a sustainable energy policy and meet European climate protection goals the use of nuclear power must be

stopped. A minority of countries cannot be allowed to enforce privileges for the nuclear power industry against the will of EU citizens. Fossil fuel energy sources such as coal, oil and gas are finite, burden our climatic environment and are increasingly tied up in resource conflicts. That the nuclear power industry is promoting nuclear reactors as a CO2 free energy alternative in this context is completely irresponsible!

The crux of the energy debate lies in the efficient usage of energy and the development of solar energy provision. The efficiency potential is not just immense in the new member states. A campaign by the International Energy Agency in the household sector in France showed that by simply replacing gadgetry with the most efficient electronic devices leads to a reduction in consumption of 40 per cent. In France alone this corresponds to the output of four nuclear plants. At the same time we want to realise the enormous potential of renewable energies in Europe: solar power, wind power, bio energy, geothermal power and hydraulic power.

Thanks to its active engagement, the European Union has become the world-wide leader as regards climate protection. This role must both be maintained and strengthened. We want to achieve ecologically fair prices by means of European energy taxation and the tax exemption for renewable energy and fuel. Thereby we can advance climate protection, the saving of resources and renewable energy, whilst creating jobs at the same time. We want an innovative energy provision, that matches people's needs and is highly efficient in its consumption. Rather than placing an emphasis on nuclear dinosaurs, we must focus on sun, wind and energy efficiency throughout Europe. The Chernobyl disaster was a wake-up call for us all – twenty years later we must at last actively back out of nuclear power!

Further information:

You can sign up to the free newsletters "EU-ÖkoNews" and "EU-Verbrauchernews" by sending an email to hbreyer@europarl.eu.int. These provide information (in German) about the latest developments in energy policy. More detailed information is also available from www.hiltrud-breyer.de

Translated by Hilary Myska

The current situation

20 years after Chernobyl, a new nuclear reactor is to be built in Finland, the fifth in that country. It will be the first new nuclear power station to be built in an EU country for 15 years. On the 12th September, 2005, the Finnish energy provider TVO invited prominent political and business names for the laying of the cornerstone at Olkiluoto on the Bothnian sea. The building contractor for Olkiluoto III (two buildings are already in existence on the peninsula) is the German/French consortium Framatome, of which Siemens and Areva are a part. Principal of the project is the energy provider TVO.

It is already clear that the building costs have exceeded the upper limit of 3 billion Euros. There is talk of 3.7 billion. For Framatome this project is a showcase and could lead to lucrative contracts in other countries. The reactor is a prototype: the first European Pressurised Water Reactor (ERP). When it is connected to the electricity network in 2009, it will produce 1.600 megawatts, the most powerful nuclear power station in the world.

In the eyes of the anti-nuclear movement the project is a deplorable victory for the international nuclear industry, who ever since the 1980's had been doing extensive lobbying for a new reactor. The nuclear industry is holding up the building of this reactor as proof of the renaissance of nuclear power. For the anti-nuclear movement this new nuclear power station is proof that politicians are totally corrupt and that are unmoved by public opinion.

The history of the Olkiluoto III project

In May 2001 the Finnish parliament passed a resolution in favour of the storage of radioactive waste in the rocky ground of Olkiluoto. The plan was supposed to be to have the facility ready by 2020, and to use it until 2120. Therefore, in the eyes of the nuclear industry, one of the main arguments against the use of nuclear power had been dropped: the lacking proof of an ultimate storage. According to the nuclear industry the problem of nuclear waste had now been solved.

In April 2002, alarmed by this apparent resurgence of the nuclear industry, the anti-nuclear movement organised Finland's largest ever anti-nuclear protest in Helsinki. Around 7,000 participants called on members

of parliament to oppose the use of nuclear energy. However, this was unsuccessful. In May 2002 the parliament passed legislation giving approval to TVO to build a fifth reactor. Out of 200 members, 107 voted in favour and 92 against. Twelve, including 7 women, of the present ministers voted against the legislation when they were members of the parliament, amongst them the current minister of state Matti Vanhanen. Before the decision he several times expressed his strict opposition to nuclear energy during events of the "Women against Nuclear Energy" and "Women for Peace."

Yet in January 2004, before the government and authority for radiation protection had given approval for the nuclear reactor, trees were cut down in Olkiluoto. By the time the authority for radiation protection obtained approval at the end of January 2005, the government uncritically had already given the green light to the project. This project was approved so quickly and was so cunningly planned, that the public hardly had a chance to react. There was no critical debate in the media. Political leaders remained silent.

All political parties, the Greens as well, are hoping to be part of the next government, and need to be careful not to be seen to oppose the interests of industry. There is now talk of a sixth reactor. The ministers, who voted "No" in 2002, are silent. The issue is not discussed in parliament. The people are engulfed by political apathy, because they have no suitable democratic way to have an influence. For example, there has never been a plebiscite in Finland about nuclear power and this will never be allowed. In Finland it can be clearly seen that nuclear industry is promoted by undemocratic means and would not be survivable in a true democracy.

Today it is a matter not only of a fifth, and most likely a sixth reactor, but likewise of the permanent storage of highly radioactive waste in the rocky ground of Olkiluoto, as well as plans for the mining of uranium in three different parts of Finland. The French company Cogema, a sister company of Areva and Agricola Resources, has undertaken surveys, not only in northern and eastern Finland, but have also sought to do so in the heavily populated south of the country. The total area affected is 95,000 hectares. There is also no public debate regarding these plans, and the

politicians are as usual silent – even the politicians who previously had taken a stand against nuclear power.

Critical reaction abroad

For those people in Finland who maintained their resistance, the criticism of the reactor construction abroad is of great significance. In December 2003, IPPNW-Germany (International Doctors for the Prevention of Nuclear War/Doctors for Social Accountability) published a position on EPR reactors. It claimed that the size of the reactor is aiming at cutting costs, which would be done at the expense of safety. Same is the digital control technology, which stands for a dangerous large experiment at the expense of safety. In addition, there exists the danger of a nuclear explosion, where, in the case of an accident, the nuclear fuel would have to be cooled with water in a Core Catcher.

The hidden subsidies are also controversial. The energy company TVO can only meet 25% of the cost of the project out of their own pockets. The rest has to be paid on credit. The creditors are the Bavarian Landesbank, BNP Paribas and the merchant banks JP Morgan and Nordea. A grand total of 1.9 billion Euros at the incredibly low interest rate of 2.6%. There are also French and Swedish export credits.

In December 2004 EREF (The European Organisation for Renewable Energy), represented by the lawyer office Kuber, lodged a complaint to the European Commission. They claim that the financing of the project is not compatible with the European competition rules. The project aids and abets the nuclear industry and is based upon illegal state subsidies.

In Bavaria, the Greens have criticised the involvement of the Bavarian Landesbank. In a press release on the 21st June 2005, the Greens' Energy Spokesperson, Ruth Paulig, said that it is not the role of the Bavarian Landesbank to "unilaterally support one form of energy supply. Provider of wind power or natural gas can only dream of such levels of financial backing. Here one company and one energy sector receiving is subsidised, which would not be marketable without public money."

The reactor in Olkiluoto, Finland will be connected to the nuclear power station in Forsmark, Sweden, by an electrical cable. The cable will mainly be financed by Sweden, which previously decided to phase out nuclear power. This has led to strong criticism there. The cable is considered to be a subsidy for the Finnish EPR reactor.

A second line is proposed to be laid from Kernovo, the location of the Sosnovy Bor atomic power station, near St Petersburg (Russia), to Kotka in Finland. This means that electricity, as had been produced in old Chernobyl-type reactors, will be able to be transmitted through Finland to Sweden and perhaps further on to Germany. In December 2004 the operating period of the oldest Chernobyl-type reactor in Sosnovy Bor was extended by 15 years. The operating period of the

reactor 2 will probably be extended this year (2005). It is anticipated that Siemens and ABB will lay the cable.

The IEA (International Energy Agency of the OECD) has warned of unforeseeable problems that could arise, due to the fact that Olkiluoto II is the first reactor to be brought onto the grid in a liberalised energy market. According to IEA, nuclear power projects world-wide were more expensive than planned, and there were always delays in the time schedule.

Does Olkiluoto III lead to a renaissance for nuclear power in Europe?

For the nuclear industry Finland is an excellent showcase of how, even in a highly advanced, environmentally aware country, the expansion of nuclear power can be prevailed.

In France the Finnish EPR reactor is being used as a prototype for the French EPR reactor that is supposed to be built in Flamanville. Construction for this is meant to begin in 2007. However, financial backing is not assured. Until now, German energy agencies have shown little willingness to participate in the French EPR project, due to the costs being up to 20% higher than the Finnish EPR reactor. This shows that Olkiluoto III was an absolute bargain at 3 billion Euros. Because the reactor was sold at the estimated price, Framatome has to bear any extra costs, or else cut costs, which could have serious consequences for the safety of the reactor.

The nuclear industry is also promoting the Finnish model in the Baltic countries. Framatome, together with the French government, have already initiated discussions with the Lithuanian government to build an EPR reactor to replace the Ignalina 2 reactor, which is closing down at the end of 2009. The vice-president of Framatome, Bernard Esteve, has already lobbied Lithuanian energy producers and authorities to make themselves familiar with the Finnish financial model. Estonia and Latvia have also shown interest in being part of this project.

The situation in Lithuania is highly explosive. The new reactor will be solely financed by credit. At the same time, the EU will meet the shut-down costs of Ignalina 2, which are estimated to come to 2 to 3 billion Euros over the next 30 years. 200 million has already been allocated for shutting down the Ignalina 1 reactor, which ceased operating on New Year's Eve 2005.

The construction of the Finnish reactor was praised in England too. On the BBC news in October 2005 the Finnish MP Mikko Elo got the opportunity to propagate the significant financial benefits and job creation the reactor would bring. At the same time, he emphasised that the storage problem had been solved, because the rocky ground in Finland was highly suitable for the disposal of nuclear waste.

In September 2005 a meeting was held between the "UK Energy Intensive Users Group" and the French

nuclear company Areva. According to Jeremy Nicholson, the head of the English company, the UK should learn a lesson from the financial model of the Finnish reactor, to make nuclear power seem a lucrative prospect and thus to make it viable again in the British Isles.

Even in Sweden, where a plebiscite voted in favour of a gradual shutdown of nuclear power stations, and voted against the expansion of nuclear energy, there is again talk of the advantages of nuclear power. It is highly unlikely that new nuclear power stations will be built in Sweden, but the Finnish showcase is used here to gain acceptance for the prolongation of the operating periods of the existing power stations. One of Sweden's main daily newspapers, Svenska Dagbladet, has especially distinguished themselves in relation to this.

In the European Parliament in October 2005 a declaration was published, in which 25 members of the parliament supported the expansion of nuclear power in the EU. Those making up this group, four MPs from Finland, four from the UK, three from France, three from the Czech Republic, two from Spain, two from Hungary, two from Slovakia, one from Italy, one from Slovenia and one from Lithuania, showed that Finland was over-represented and set the pace.

If the people in Europe and in the whole world want to oppose the madness of nuclear energy, we have to work hard together to show that citizens want to have another energy future. This is why our campaign for a million signatures' is so important.

Women against nuclear energy – a history of the movement

There are presently four nuclear power plants operating in Finland. Two in Olkiluoto on the west coast and two in Loviisa on the south coast. These were put into operation between 1977 and 1982. In the 1970's there were already plans for more reactors.

The Finnish movements "Women against Nuclear Energy" and "Women for Peace" had actively campaigned against nuclear power prior to the Chernobyl catastrophe in 1986. The expansion that had been planned at that time was stopped by the catastrophe. After Chernobyl these women's movements, together with the "Energy Movement" and various environmental groups, gathered more than 60,000 signatures in a petition to phase out the use of nuclear energy in Finland.

"Women against Nuclear Power" and "Women for Peace" organised protests at nuclear power plants and were taken to court for trespassing on land owned by nuclear power stations. The defendants were acquitted. They also campaigned in other ways. For example, the protested at the nuclear radiation authorities, against proposed nuclear power plants in other countries, they were writing articles, holding memorials to Chernobyl, participating in seminars abroad etc. Main aim of this activities has been done to phase out nuclear power.

Already by the end of the 1980's the nuclear industry had begun secret lobbying to build a fifth reactor in Finland, and by the 1990's it was clear that they were preparing an application for a fifth reactor. Once again these women's groups did a lot of work in cooperation with other anti-nuclear groups. Professor Edmund Lengfelder, Germany, was invited to report in Finland on the impacts of Chernobyl. His visit gained a significant response in the media. In addition, at this time there was a very active anti-nuclear group in the parliament. Renowned politicians argued strongly against the expansion of nuclear power. The Greens were especially active, which at the same time put pressure on other political parties.

In September 1993 the Finnish anti-nuclear movement claimed a significant victory. The Finnish parliament voted 107 to 90 "NO" to nuclear energy. This was – so everyone thought – the end of the expansion of nuclear energy in Finland. But the anti-nuclear movement had underestimated the furtiveness of the nuclear industry, as well as the spinelessness of politicians. By the time of the March 1999 elections the debate on nuclear power started again. The nuclear industry had already clandestinely convinced many politicians and involved them into the planning for a fifth reactor. The anti-nuclear movement, on the other hand, was totally unprepared. In spite of this, because of the women's movement, between 1998 and 2002 many anti-nuclear protests took place.

In April 2002 the largest ever anti-nuclear protest in Finland took place. In May 2002, just before the parliamentary vote on nuclear power, the European Anti-Nuclear Platform was presented in Helsinki. This platform was founded by 190 European organisations with the aim of bringing nuclear power in Europe to an end. Many organisations sent postcards and emails to Finnish members of parliament. Various campaigns opposing the fifth reactor in Finland took place in countries such as Sweden, Austria, Germany, Russia, Croatia, Slovenia, Belgium, England and Spain.

At the end of May the Finnish parliament voted 107 to 92 "YES" to fifth nuclear reactor. On this day it was clear that democracy in Finland was dead.

What women are doing in a different way in resistance

Women's groups in Finland have always emphasised the need for international co-operation. Many people have been invited from other countries to illustrate that there is world-wide opposition to nuclear power. Women have organised actions on the streets, collected names and initiated and submitted international petitions. They have put pressure on politicians. The foreign guests could approach political parties with reports, requests or appeals and make complaints to various ministries.

Prior to parliament passing legislation for the fifth reactor in May 2002, women's groups were criticised for placing too much emphasis on the dangers of nuclear power. They had failed to suggest alternative

energy sources and had failed to address the issue of climate change. Later many of these organisations admitted that their criticisms were misplaced and the women's groups were correct. The disagreement in the anti nuclear movement unfortunately gave the nuclear industry the competitive edge.

There is deep divergence between male and female analysis regarding the use and building of nuclear power plants. Men emphasize economic growth, competition, progress that unfortunately includes human sacrifices, and they trust technology. Men usually have a more distant and rational relation to daily family life and nature. Men more easily believe in „experts“ and „authorities“ not by following common sense and feelings or by acting spontaneously.

Most men are afraid of getting labeled as dissidents or „softies“. Finnish men are also well-known for their stubbornness and inflexible mind. Once supporting nuclear power, always supporting nuclear power. And last but not least, men are often fascinated by complicated technology and gigantic apparatuses. It is more or less a matter of potency power.

Unfortunately, there are also women who embrace all these features. Women fight for equal Status in political and business life, very often leads them to adopt male ways of thinking and acting. Equality is thus no real equality but women getting into power by supporting typical male values. Emancipation is not only about equal salary for equal work and doing the dishes in turn. Real emancipation is when society is steered by an equal portion of male and female values.

Public opinion polls in many countries all around the world show that regarding environmental concern, concern for social security and concern for peace, women are in the majority. Still, governments all around the world are daily making decisions in the name of economic growth that supports environmental degradation and decisions in the name of competition that leads to cuts in social welfare. Governments support the militarization of our society by accepting the NATO enlargement and by supporting the arms race among poor countries.

What comes to opposing nuclear power in Finland, the toughest and most active and conspicuous resistance has been among women. A rather small group of women working as teachers, freelance editors, authors and in rather alternative professions. Women who perfectly well are aware of the fact that they are far too radical to be promoted for high posts within traditional parties or getting well-paying jobs in some big companies. Women who are not trying to reach equality on male values. These women have kept the resistance alive. If women would have been asked if nuclear power should be used for energy production or if nuclear weapons should be produced there would hardly be any nuclear power stations in the world and no nuclear weapons.

Women represent half of humanity. Our voice must be heard.

The anti-nuclear movement in Finland needs International support

On Chernobyl remembrance days in 2003, 2004 and 2005, the anti-nuclear movement invited guests from a variety of countries, who submitted letters and submissions to the government and parliament. Articles were written on the dangers of uranium mining and the necessity of using renewable energy. At the large joint anti-nuclear demonstration in Paris in January 2003, together with the French organisation „Sortir du Nucleaire“ and the Austrian „Atomstopp International“ the 1 million signatures campaign was begun. This campaign has been carried on by „Friends of the Earth Europe“ internationally.

The situation in Finland seems hopeless. Many organisations have given up and are concentrating on problems of climate change. Additionally, the next generation of young people is environmentally conscious, but don't remember Harrisburg or Chernobyl, and don't have a real understanding of the dangers of nuclear power. It will be a huge task to educate these young people of the dangers - from uranium mining to the final storage.

We, the members of “Women against Nuclear Power” and “Women for Peace” are hoping for support from other organisations throughout Europe. It must be possible to collect a million signatures from people in Europe, who think and feel in the same way as we do.

NUCLEAR POWER IS A HIGH-RISK TECHNOLOGY, WHICH MUST BE STOPPED!

Translated by Edward Alaszewski

¹ www.atomstopp.com/1million/

Milya Kabirova

Grassroots fight for right and survival in nuclear contaminated areas

My name is Milya Kabirova and I come from Russia, from the city of Chelyabinsk, in the Southern Ural. During the world war the Soviet government transplanted most of the armament industry which had been based in cities on the western side of the Urals to the Eastern side of the Urals where it would be safe against the enemy. It was also therefore that Russia's "nuclear" regions concentrated behind the Ural mountains. The nuclear industry is located near Chelyabinsk, in Sverdlovsk, in Tomsk, in the Novosibirsk region and in the Krasnoyarsk area. The regional governments of these regions have always been and continue to be pro-nuclear. The population of these regions suffer from 50 years of contamination with radionuclides, and continue to be exposed to a huge health risk.

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Severe nuclear contamination

In 1949 the nuclear armament plant "Mayak" started operating in the province of Chelyabinsk. The Mayak complex dumped its liquid radioactive waste from the beginning of its operations in 1949 until 1956 in the Techa-Iset-Tobol river system. During the period 1948-1952 the discharge of radioactive waste into the river Techa totalled three million curies. The radioactive contamination of Mayak has already reached the Arctic Ocean via the rivers Techa, Iset, Tobol, Irtysh and Ob. The contamination of these rivers exposed 124,000 people living on the riverbanks to severe levels of radiation. The majority of the people living in the villages along these river banks belonged to the ethnic minorities of Tartars and Bashkirs. In 1952, 67% of the population of the village of 'Metlino' were diagnosed with leukaemia. Several villages alongside the river were evacuated, while the inhabitants of certain others remained. Those residents who were evacuated had received effective radiation doses in the range of 0.35 Sv to 17 Sievert. Of the remaining people in the area, it was the 4,000 residents of the village of Muslyumovo who received the highest doses, averaging 2.8 Sv. Until 1992 inhabitants of this region were not informed about the radioactive contamination which they had been exposed to over many years. The population has been subject to compulsory testing of blood and bone marrow since 1950, but the results were kept secret until 1992. They were not aware about the serious health risks associated with radiation. The authorities

explained the high mortality as due to 'low Standard of living'. When finally made public, the blood analyses indicates highly increased levels of various radiation-inducible diseases and ailments. As if the dumping of radioactive waste was not enough, the population was further exposed because of several terrible accidents which happened in Mayak. These accidents have always been kept secret. In September 1957 a liquid radioactive waste storage tank exploded following a failure in the cooling system. An area of 23,000 square kilometres (almost half the size of the Netherlands) was contaminated and 270 thousand people were exposed to radioactivity. 10,700 people who lived in areas where the soil was considered too highly contaminated, were silently evacuated. The evacuated population could not bring any of their belongings. Their houses, livestock and clothes were burned, and after a 'desinfecting' shower they were sent away to the surrounding cities in clothes provided by the government. They were asked not to talk about what had happened. This nuclear contaminated area of 23,000 square kilometres is known as the Eastern Ural's Radioactive Trace (EURT). In the long hot summer of 1967 another major accident occurred when the lake Karachay dried up. This lake had been used as a dump-site for radioactive waste from Mayak and when it fell dry the nuclear contaminated sediments were blown over an area of 2,200 square kilometres, again exposing many people to radioactivity.

The village "Muslyumovo" on the radioactive river Techa

Muslyumovo is a village of 4,000 inhabitants on the banks of the contaminated river Techa. The area of Muslyumovo is severely contaminated by the nuclear accidents and daily operation of the Mayak nuclear plant. Though the health situation in Muslyumovo is critical because of the pollution, the villagers have never been evacuated. Mayak needed the Muslyumovo railway station. In 1998, more than 40 years after the first nuclear accident, the villagers of Muslyumovo had a brief moment of victory after a broad public campaign, when the oblast (provincial) authorities decided that Muslyumovo should be resettled. Local NGOs and activists, including myself and my husband, had been fighting for this for over 7 years. However, the authorities never said when and where

Muslyumovo would be resettled. Due to economic problems so far little has happened. Villages that have been evacuated after the accidents have been resettled in temporary homes, made out of asbestos board, that should last for a maximum of ten years. This was 30 to 40 years ago. These temporary homes are still being used today. Until 1992 the villagers



were never informed about the dangers of the radioactive contamination of the river. The high level of birth defects among newborns and the high mortality among the adults was attributed by the local health authorities to a "low standard of living". When a first foreign team of scientists, of the German nuclear research institute in Munich, visited the village the mid-go', they found that the local population had accumulated such levels of radioactivity over the last 30-40 years which would have been lethal had they been received in one dose. The scientists also found contamination in the food of the villagers, including fish from the Techa river with levels of more than 7,000 bequerel per kilo.

Chernobyl started the Ural ecological movement

We don't know how long the secret of the radiation accidents at the nuclear facility "Mayak" would have been kept had the Chernobyl tragedy not happened. The Chernobyl tragedy awoke the public opinion in Chelyabinsk. Chernobyl stands at the cradle of the Ural's ecological movement.

My own work is inspired by that of my mother. My mother, Sarvar Shagiakhmetova, was born and raised in the village of Muslyumovo. In 1995 she was the first person to start a lawsuit in order to get recognition of her and our family's diseases linked to radiation and to get compensation from the Mayak nuclear plant. Her husband, my father, had already died in 1962 of leukaemia. In the course of the lawsuit two of my brothers also died. The authorities finally analysed the blood of myself and my four other brothers and sisters and we were diagnosed with chronic radiation disease. The lawsuit that could have created a precedent for other cases was stopped when my mother died in October 1998.

I have been working now for many years with other environmental organisations in the Chelyabinsk region, among other the Movement for Nuclear Safety. In 1999 I founded the NGO Aigul, which means "Moon

Flower" in Tartar. It is a beautiful name for a sad flower which grows not under the sunshine but in the white stillness of the moon, resembling the nuclear winter. Aigul unites women who suffer from chronic radiation disease or who have children suffering from radiation exposure. Our main objectives are to protect civil rights of people who have been exposed to radiation and their descendants, to promote an ecological way of thinking, to promote the principles of humanism, to eliminate nuclear arms production and usage and to promote public participation in shaping state policy and laws.

In 1992 together with scientists of the Vavilov Institute for General Genetics in Moscow we conducted genetic research of the blood of children who are descendants of the irradiated population around Mayak. The results were astonishing. It showed that every fourth child has chromosome mutations. Our children are mutants! Even from children born as late as 1997 we found radiation markers in their blood. The radiation is effecting the 4th generation. Worse, the research shows that the level of genetic damage is higher among the children than among their parents.

This research also showed how the radiation has caused chronic pathologies among both adults and children. We have an increase of radiation disease, statistically significant high rates of cancer, as well as high rates of sterility and inborn deformities. As my husband said in an interview with Australian television, "The atomic bomb which was built in Mayak hasn't as yet killed a single enemy, but it has caused half of the population of my village to die from radiation-related diseases."

The population of our region is suffering terribly from the mistakes of "nuclear" officials. But maybe they were not mistakes. Maybe those who made the decisions to produce nuclear weapons took it for granted that they were putting the lives of the thousands of people around Mayak in lethal danger.

The Government of Russia has recently agreed to import foreign nuclear spent fuel to the territory of Russia to store and reprocess, against the sum of 20 billion USD. A large share of this plutonium waste will come to Mayak. So Moscow will get 20 million dollars to send foreign plutonium to our region. We don't believe much of that money will be used for good Investments in our region. The Ministry of Atomic Energy is trying to sell this decision to the public by creating a myth about high technologies. The NGOs of my region are against this commercial venture. Now that we are finally starting to understand the tragic results of the previous activities of the Minatom facilities, we do not want to increase the risk for the population even more.

Through the activities of Aigul and other NGOs we try to protect our right to a healthy environment. We use different methods for this, we have meetings with local officials, we work with the State Duma deputies, we organise signature campaigns against foreign

nuclear spent fuel import, and we hold protest actions together with other NGOs such as Greenpeace Russia.

The reaction of authorities to such actions are not always predictable. But we are ready to conduct a constructive dialogue to solve our problems. Thus, beginning with 1999, for three years, the "Movement for Nuclear Safety" has been organizing and conducting negotiations "Society – Government: Dialogues on Nuclear Policy". The aim of these negotiations is to develop mechanisms of involving the public in decisions on nuclear policy. We are trying to have NGOs take part in negotiations with the officials and to monitor decision-making and implementation.



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From the experience of the negotiations we can say that there are three levels of interaction: discussion, dialogue, and cooperation. In the first year we merely had 'discussions' with the officials. There were many emotions as each side tried to express their dissatisfaction without listening to the other side. The second year things got better and we had a more constructive dialogue. We prepared a number of documents and concrete proposals that were listened to with great attention. Last year the negotiations were held in the Ministry of Atomic Energy, the Office of the General Prosecutor, the Ministry of Foreign Affairs and the Ministry of Health. We submitted Memorandums on the moratorium on the federal laws, permitting foreign nuclear spent fuel import to Russia. With the Ministry of Health we outlined a number of joint activities. And finally we had our first victory. The Chelyabinsk public organizations "Pravosoznanie" and "Movement for Nuclear Safety" went to the court with the claim that the import of spent fuel as ordered by the Russian federal government was in violation with the Russian federal constitution. We argued that therefore "Mayak" should send the radioactive waste from the nuclear power Station "PAKS" back to Hungary. The supreme court made a positive decision! The society – government dialogue has become a necessity in order to protect Russian population interests and to strengthen public control in the spheres of nuclear safety and public health. The joint discussion of different aspects of nuclear policy at such a level can become a step towards the dialogue between the

federal government officials – who live far away in the capital – and the population of the regions who suffer the impact of their decisions.

The speech was delivered at the "European Women's Conference for a Sustainable Future", in Célakovice (Prague), March 14 -17, 2002, organised by Women in Europe for a Common Future - WECF. First published in: WECF (ed): Why Women are Essential for a Sustainable Development. Thanks to WECF for the right to reprint.

Good Arguments against Nuclear Energy

Risk of war and terror a real threat

“Nuclear terrorism is still often treated as science fiction - I wish it were. Were such an attack to occur, it would not only cause widespread death and destruction, but would stagger the world economy and thrust tens of millions of people into dire poverty.” UN Secretary General Kofi Annan

The current global political tensions make it clear: a military employment of nuclear technology cannot be ruled out. Quite the opposite, almost all states that have developed nuclear technology, were at some point interested in the bomb and, sooner or later, also built it. The technology used for civilian purposes is after all the basis for the construction of nuclear weapons. Plutonium is also produced in commercial nuclear reactors, which can be separated in a reprocessing plant and used to make a bomb. The necessary facilities and knowledge can be obtained on the global market, as has already been shown in the past.

In addition, nuclear reactors represent possible targets for suicide bombers, and not all nuclear power plants are designed to cope with intentional or unintentional airplane crashes. Whether the apparently sufficient protection would be able to withstand the real thing, in other words if a jumbo jet came down and hit its target, is very doubtful. Thus, after 11 September 2001 the Reactor Safety Commission called into question whether all systems can remain sufficiently functional in such a scenario so as to prevent reactors from going out of control.

Nuclear power increases the risks posed by totalitarian regimes and terror attacks.

Raw materials – an infinite resource?

All uranium, the raw material required to produce the fuel for nuclear power plants, has to be imported into Germany. But uranium is a limited resource and, based on current consumption levels, it will run out in a couple of decades. Official sources speak of a time period of between 20 and 25 years.

Even the fast breeder reactors that were developed with such great expectations could not solve this problem. The idea was that these would be able to make the scarce uranium reserves go much, much further in combination with reprocessing plants. It is

the high-risk nature of the plutonium economy that makes it impossible to gain control of it both economically and in terms of secure technology. The German prototype of the fast breeder reactor in Kalkar, that never went into operation, stands behind as a symbol of this misguided development, leaving behind an expensive building site worth several billion Euros. Apart from one Russian fast breeder reactor, all other similar projects have been terminated due to insufficient security measures or poor operating results.

In comparison to fossil fuels, the required amounts of uranium are rather minimal – at present around 40,000 tonnes of uranium are globally sourced every year for the 440 nuclear power plants that generate electricity. However, thousands of tonnes of uranium ore are required to produce just a few tonnes worth of fuel rods. A lasting radioactive pollution of the mining areas is unavoidable. The sanitation of such areas, as was done by the Wismut company at the uranium ore mines in Saxonia and Thuringia, is extremely time-consuming and costly. According to the latest estimations released by the German Economic Ministry such sanitation will cost more than six billion Euros. After the initial sanitation, long-term measures for water treatment, ground management and environmental monitoring are required for an indefinite time period.



Many uranium mines lie on land belonging to native inhabitants, as for example in Australia, India and North America, and these peoples are fighting against the destruction of their territories.

The use of nuclear power plants does not really improve the security of energy supply.

Nuclear power plants in operation

Even at normal operation levels the low radiation emitted by nuclear power plants have an impact on health, the effects of which have been the subject of ongoing debates amongst experts.

In any case there is a serious risk of accidents. Accidents can never be ruled out completely, regardless of whether they are caused by technical failure of security components or human error. However, the likelihood, of a serious accident, such as an MCA, occurring, which the security installations would be unable to cope with, is quite low for an individual nuclear power plant. Nevertheless, the more power stations there are in operation, the more likely it becomes that such an accident could happen in the foreseeable future.

Supporters of nuclear energy like to draw attention to the high security standards at German nuclear power plants. German facilities are therefore apparently much safer than those in the rest of the world. It is rather astonishing, that Germany should adopt such a stance, when taking into consideration other technologies. Are German computers and cars less likely to break down than products from other countries?

According to an official survey, the likelihood of an MCA occurring due to technical failure at the Biblis nuclear power station, for example, is one in every 30,000 years of operation, thus 0.1%. When taking the 17 nuclear power plants into the calculation, we already see an increased chance of an MCA at 1.7% during an operational period of between 30 and 40 years. When this is projected onto the approximately 150 nuclear power plants in Europe the figure grows to over 15%. Globally, there are almost three times as many nuclear plants in operation!

By comparison: the chance of winning the German lottery lies at 0,000007%, i.e. incredibly small. Nevertheless, if enough people play, someone will inevitably hit the jackpot every now and then. The example also shows how differently chances and risks are perceived, depending on whether they are viewed as positive or negative events.

For several years now, various "inherently secure" reactor concepts have been repeatedly put forward, which allegedly rule out the possibility of a nuclear meltdown. Yet nobody can honestly deny that there could be an accident at any reactor, regardless of which type, in which so much radioactive matter was released that it would cause a regional or even national disaster. It should be noted, that the calculations and analyses only consider the risk of technical failure. The possibility of mistakes being made by operational staff is generally not even taken into consideration.

The consequences of an MCA would be fatal. If it came to a nuclear meltdown, following a fault in the cooling system, considerable amounts of radioactive matter could escape within a short space of time. Whether security protection measures could take effect so quickly is very doubtful, as the affected area

can extend to up to 100 km, depending on the weather. According to official studies, an MCA could cause up to 5 billion Euros worth of damage in Germany. But one should look beyond blank figures. Then one sees not only material damage to goods and property, but also casualties (an MCA can result in the death of several tens of thousands of people) and long-term effects on health. The suffering resulting from such accidents would be so enormous that it cannot be expressed in mere numbers.

It is not possible to control the risks created by nuclear power usage.

Waste

Even the problem of how to dispose of nuclear waste has not been solved. There is no foreseeable final storage in sight, and it is highly questionable, as to whether such a facility can ever be found. After all, thousands of tonnes of highly toxic waste would have to be hermetically sealed off from the surrounding area for thousands of years.

Added to this are the dangers of transporting nuclear waste. At present the burnt down fuel rods from Germany's reactors are sent abroad for reprocessing due to the absence of a final storage facility. As the highly radioactive waste then has to come back, it is transported across Europe again, and then taken to an interim storage facility. It is impossible to exclude the possibility of road or rail accidents occurring sooner or later, and it is debatable whether the transport containers would be able to withstand any kind of hazardous situations. There has been criticism that these have not been sufficiently tested as regards potential accidents. The nuclear waste is then possibly moved a third time, if a final storage facility can be found. But who wants to have such a thing on their doorstep?



The longer we go on using nuclear energy, the greater the inherited pollution burden for future generations.

The questionable value

Nuclear energy is repeatedly praised for not emitting any greenhouse gases. However, unfortunately there are no completely climatically neutral energy supply options, not even as regards renewable energy sources. Energy is always required to build the facilities, and as long as fossil fuel energy providers are still used primarily to do so, one cannot regard such energy as carbon free. In the case of nuclear energy, there is further energy consumption as regards

the extraction, processing and transport of the fuel, in addition to the "grey energy" that is found in the plant. This upstream fuel cycle must be taken into consideration in order to make a sensible emissions comparison of the different energy systems. Thus, nuclear energy does significantly worse than renewable energy, and in certain cases even worse than fossil fuel energy sources. According to the calculations of the German "Öko-Institut" (Eco-Institute) the use of natural gas in small scale combined heat and power plants is more climate-friendly than nuclear energy, if the waste heat of electricity generation is used to replace heating systems based on oil.

There is another issue here: nuclear power plants can only be used to generate electricity, yet the largest proportion of energy consumption goes on heating – space heating, water and process heating. Electricity could actually be used as well, but it would be neither sensible nor efficient. Electricity is a high-quality form of energy, and there is always considerable wastage when it is generated – in nuclear power plants this amounts to up to two thirds of the energy input! Whilst much of this lost heat can be used in other ways at smaller units, such as small or medium sized combined heat and power plants, this is not possible at nuclear power plants, where so much heat is lost. The distances to transport the heat would be too great, as much heat is lost in the pipelines.

A final point to consider is that nuclear energy plays a very subordinate role as regards energy supply on a global scale. Its share of primary energy consumption is about 12 per cent in Germany, and 15 per cent in Europe (including both "old" EU member states and accession countries). Worldwide nuclear power plants cover only a few per cent of the worldwide energy demand – figures fluctuate between under 3 and around 7 per cent, depending on whether the traditional usage of biomass is included or not.

Only 31 states actually use nuclear power, and 70 per cent of all nuclear power generated is concentrated in five countries: the USA, France, Japan, Russia and Germany. Less than half of the EU member states operate nuclear power plants, and five of these have committed themselves to a moratorium or a phase-out, whilst the majority of them have made definitive decisions against nuclear energy.

Against this background it is unrealistic to build so many nuclear power plants for them to be able to make an effective contribution to climate protection. In order to increase their current contribution to just 10 per cent, more than 1,000 plants would have to begin operation.

Nuclear power is not the best strategy for the protection of the climate – it would signify a jump from the frying pan into the fire.

The economic perspective

For financial reasons, most energy providers are no longer interested in building new nuclear power

plants. The costs of investing in them today are higher than those for wind or hydraulic power, and combined heat and power generation or some cost effective options to utilise biomass. The only thing that remains significantly more expensive is photovoltaics, though even this has gone down in cost over the years.

On the other hand, extending the operational life of nuclear power plants would be relatively cheap for the operating energy companies, as the plants are already built and the majority were written off a long time ago. But, with every extra year of operation, the risk of a disaster rises, not least as a result of age-related material fatigue. The amount of nuclear waste would also grow correspondingly. At the same time the move to low-risk and environmentally friendly alternatives would be slowed down.

The matter of liability is particularly serious as regards the older facilities. The economic situation would be even more unfavourable, if operators were forced to bear responsibility for potential damage caused by an accident. There are two aspects of the liability issue for operators of nuclear power plants.

Firstly, an accident can cause unbelievably extensive damage. The liability requirement of the operators is correspondingly minimal, at a mere 5.5 million Euros of damage costs in most countries according to the Paris Convention. Any further costs are generally covered by the state, but even then, mostly only up to a particularly amount. Further, only damage caused to health and/or loss of property is covered. Environmental damage is not taken into consideration.

Secondly, there is the question of who should take responsibility for the secure dismantling of the power plants, which is extremely complex and time-consuming. In Germany, operators are required to set aside reserves for this. However, these funds can be used as capital stock for investments in other energy providing or waste disposal industries. But, it is the consumers who have actually financed these reserves as part of the price they pay for electricity. In other countries, such provisions have not necessarily even been made. In such cases, the burden is passed on to the general public.

Even from an economic perspective, nuclear energy does not do well. Were it not for hidden subsidies, the situation would look even more unfavourable.

What can be done?

A few years ago there was still talk of "alternative energy sources". The enormous potential was theoretically understood, yet hardly anyone could imagine that such energy supply could be a reality in the near future, both for technical and financial reasons. Today the renewable energy sector has outgrown the alternative niche. Each one of these energy sources – solar power, bio energy, wind power, hydraulic power, geothermal energy – is so abundantly available that the world's energy demand could technically be covered

many times over. The technologies required to support their usage are sophisticated and can be further improved. Most importantly, they do not present any kind of comparable risk as that of nuclear power. Moreover, there remains a considerable savings potential by reducing consumption, often at much less cost than within energy production.



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Solar & Save are the keywords: if the construction industry would employ all technical possibilities within its new developments and restoration projects to improve energy efficiency, and combined this sensibly with the use of renewable forms of energy, the result would not just be environmentally friendly, but also the most economical. Further, this strategy generates the most jobs. According to figures from the various industry representatives, in Germany, around 40,000 people are employed in the nuclear industry, whilst around 150,000 people already work within the renewable energy sector. With further development of renewable energy, this figure could rise to half a million, plus a few hundred thousand jobs that are secured or newly created by energy-focused restoration of buildings.

It serves to speak up for a energy system based on energy efficiency and renewable energy, which offers security for the future and the environment at minimal risk. Moreover, the technologies we have developed to switch to a sustainable energy system in industrialised countries are also available to developing countries.

Translated by Hilary Myska

The Authors

GOTELIND ALBER (*1955), physicist, was for many years the director of the Climate Alliance of European Cities. In the year when the nuclear accident in Chernobyl happened, she worked on a study concerning energy saving and learnt how to prepare pasta sauce with miso.

HILTRUD BREYER (*1957) is member of the European Parliament for the German green party Bündnis90/ Die Grünen. She is member in the committee for environmental questions, public health and nutrition security, co-ordinator of the GREENS in the committee on women's affairs and deputy member in the committee on legal affairs.

ANNA GOLUBOVSKA-ONISIMOVA (*1964) is cofunder and president of MAMA-86. She has a degree in architecture and in environmental management. As one of the leading persons in the green movement in the Ukraine she is promoting participatory democracy and environmental policy. She is mother of two children (born 1989 and 1998).

MILYA KABIROVA (*1959), is born in the nuclear contaminated region of the Eastern Ural and is still living there. She is managing the women's organisation Aigul and member of the board of the „Movement for Nuclear Safety“. To assure her subsistence she is running a small store.

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ULLA KLÖTZER (*1948), married, two children, is teacher at the Rudolf-Steiner-school in Helsinki, Finland. Since 25 years she is taking active part in the peace and anti-nuclear-movement and since 15 years in the EU-criticising movement in Finland and Europe wide.

HEIKE MAHLKE (*1941), theologian, lives in Wendland (the region where the nuclear waste is stored). Since 1977 she is engaged in the anti.-nuclear movement, co-initiator of the women of Gorleben (Gorlebenfrauen)

KRISTIN MÜHLENHARDT-JENTZ (*1945), M.A., actor until 1982 and sociologist since 1999, married, two children born in 1977 and 1982. 1986 she co-funded the „Mothers against Nuclear Power“ in Nuremberg. Since 2000 member of the board of the Mothers against Nuclear Power Munich and member of the IPPNW (International Physicians for the Prevention of Nuclear War).

ULRIKE RÖHR (*1949), thightrope walking between techniques and social sciences, always analysing the gender aspects - especially in the fields of energy and climate change. Gender justice is the important objective she wants to achieve in her life, currently in her function as director of genanet - focal point gender, environment, sustainability

HEIKE SABEL (*1965), journalist, living in Pirna (Saxony), head of the association „Together in the Future“, books she published: „Normalno - the gentle strength of the women from Minsk“, „Nastupnaja stanzija - stations of meetings in Belasrus“

CORNELIA STADLER (*1950), journalist and trainer for communication, two daughters and two granddaughters, living in a house with multiple generations. Her whole life she is eager to find the balance between political work, employment, and family work. Since 1986 in different intensity engaged in the Mothers against Nuclear Power, since 2002 member of the board of the association.

Giving fresh impetus: **genanet** – focal point gender justice, environment, sustainability

Sustainable development cannot be achieved without gender justice. This statement, which has frequently been repeated since the UN Conference on Environment and Development in 1992 is also the basis of the work of **genanet**, the focal point gender justice and sustainability, which commenced its work in mid-2003. It proceeds on the assumption that political decisions and planning in the field of environmental protection and nature conservation can have differing impacts on men and women but have not yet been accorded the attention they merit. Initiative, commitment, research and networking are therefore called for in order to counter existing obstacles and to support positive approaches.

Initiative and staying power were also needed in order to get the centre off the ground. An important role in this was played by the working group “women” at the Forum Umwelt und Entwicklung [Forum on the Environment and Development]. Since its founding in 1994, i.e. shortly before the 4th World Conference on Women, the working group has fought for the establishment and financing of structures for networking on practical activities and for discussing research questions relating to women/gender and environment/sustainability.

In accordance with this, **genanet** sees itself as a national coordination and service centre which pools existing work on gender, the environment and sustainability. In doing so, it aims to receive and pass on ideas from others but also to put its own stamp on them. Major focal points of its work are: firstly, supporting environmental organisations and administrations which want to set themselves the task of integrating gender aspects into their technical work, and secondly, developing strategies and arguments which can be used for anchoring the gender perspective. Political lobbying and the provision of information for its specialist public accompany and support these activities.

Information pool

One of the instruments for disseminating the gender approach in environmental and sustainability policy is **genanet**'s information pool, which is available on its website. It offers a database with literature and research results on a wide variety of topics from across the entire environment and sustainability spectrum: from biodiversity and product development to risk assessment and employment. From the gender perspective in each case, of course. Summarized background information, presented on fact sheets similar to those which you find in this brochure, supplement this offer and are intended to assist the reader in obtaining an initial overview of possible gender differences or effects of gender relations in the subject areas. To examine current topics in greater depth, seminars are offered or conferences organised. A pool of experts on gender and sustainability makes it possible to provide the names of speakers on (almost) all topics on request. This also helps to counter the persistent rumour that in many fields there aren't any women to call upon, which is repeatedly given as the reason why only men are speaking at a conference. An events calendar and reports on conferences and seminars complete the package.

In addition to the information pool, the quarterly circular “**genaNews**” provides the opportunity to have the latest information on research projects, political developments, new publications, event dates, initiatives and campaigns delivered “free to your door”.

genanet's „think tank“

The heart of the centre is its think tank: it is here that position papers and opinions on current environmental policy topics and processes are drawn up. This was the case, for example, in the run up to the International Conference for Renewable Energies (Renewables2004), for which, partly in collaboration with women's/gender networks operating internationally, statements, demands and

background information were drawn up, which were then presented at the conference. It was also the case for the first revision of the national sustainability strategy, which the Federal Government meant to use to report on progress toward sustainability and to adapt the strategy to take into account current developments. Here, position papers on the individual subject areas highlight the – usually overlooked – gender perspective and make suggestions on how it could be integrated. These papers also form a basis for political lobbying.

The think tank is, however, also designed to provide a space, away from current and frequently very fast-moving day-to-day political business, to search for new approaches and links between the topics of gender relations, the environment and sustainability. Thinking up new ideas and developing innovative strategies for integrating the gender perspective into environmental policy is a challenging demand and all too often fails because of the lack of time from which everyone involved suffers. Nevertheless, this demand is at the same time the vision which holds the network together. Therefore, at least a partial attempt is made here to find new ways to meet the contradictory requirements of time pressure on the one hand and the demand for (time-)intensive familiarizations and discussions on the other. Two fora were recently launched on the Internet, one on the topic "Biodiversity – Nutrition – Agriculture", where amongst other things the viewpoints of regional, organic and GM-free agriculture will be discussed from the gender perspective. In a further forum, on gender justice, issues such as that of "what is just and what is equal" will be explored. The fora also invite people to plan joint projects so that they can discuss individual aspects at greater length and more intensively.

Do good and talk about it: PR work

genanet wants to bring gender-just environmental and sustainability policy issues closer to the attention not just of the specialist offices responsible but also of a broader public. Intensive press publicity work is the basis for this but it also shows clearly how unwieldy and difficult to convey the topic is. Newspapers generally report daily and need to find the most attention-grabbing stories possible, which are rarely on hand in this subject area. Greater thought will therefore have to be given in future to the campaigns and occasions which can be used to bring gender and sustainability issues to the attention of the media. The environmental journalism, on the other hand, is increasingly showing itself to be open to gender topics and reports, to a greater or lesser extent, regularly on these.

Beyond the confines of Germany: European and international cooperation

genanet is primarily active at the national level, but also wants to use the positions it has drawn up to exert influence on European environmental and sustainability policy. To this end, the centre is collaborating closely with European and international women's networks. As far as networking at the international level is concerned, the aim is to provide greater awareness of the gender aspects of environmental and sustainability issues in the industrialised North.

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