

Report by **Olga Amelkina**, Scholar '16
SWEDISH WASTE MANAGEMENT SYSTEM
At KTH Royal Institute of Technology (Stockholm)



To "substantially reduce waste generation through prevention, reduction, recycling and reuse" is the 5th target in Twelve Goal of the new global Sustainable Development Goals which was established in 2015 and continues to 2030.

While some countries, including Sweden, follow the plan to achieve zero waste, other countries have almost 100% of unrecycled waste. Russia belongs to the latter, despite making an effort to introduce alterations in this sphere, beginning with the introduction of some changes to legislation in 2014. This is why I have a strong interest in waste management, not only conservationist, but as a lawyer also.

I am immensely grateful to the Sverker Åström Foundation for the opportunity to conduct my research in waste management and learn from one of the leading figures in it - Sweden.

For the duration of my time in Sweden, I was a guest researcher at the Department of Chemical Engineering and at the Division of Industrial Ecology at KTH.

It is always fascinating when you move outside your traditional circle of friends and colleagues, meet new people from other backgrounds and participate in activities you may never have previously participated in. It gives you the opportunity to look at the world in a different way. This is the reason why I want to learn about waste management systems from different stakeholders: people of different ages and from different professions, governmental and nongovernmental organizations, profit and non-profit organizations, with their own positions and strategies regarding waste management. For me, as a lawyer, this is very important.

I had the unique opportunity to talk with professors and PhD-students who work with waste management systems, circular economy and with recycling of different kind of wastes, get knowledge about current research and tendencies in this sphere. I want to express my gratitude to Kerstin Forsberg (my supervisor at CE Department), to Cecilia Sundberg (my supervisor at IE division), to Monika Olsson (coordinator of the Waste Management course), to Björn Frostell (professor at IE Division), Graim Aid (worker at Ragn-Sells company, former PhD student at IE Division), and



to PhD students Alexander Chernishov, Pouya Haghghi Mood, Jonas Granstrand, Leonardo Gastelum, Rajib Sinha and Mauricio Sodre Ribeiro.

At university, I attended the Waste Management course for master students. During the course we had very useful lectures and study visits. We visited Sims WEEE (Waste Electrical & Electronic Equipment) Recycling facility in Katrineholm, Ragn-Sells AB - recycling company dealing with different kind of wastes, Uppsala Vatten (biogas producer) and VattenFall (incineration facility) in Uppsala. From these visits, we learned that waste can be an indispensable resource, for energy, electricity and biogas production.

Beyond the course, there were many other events devoted to sustainable development and waste problems around the world. In Sweden, I felt that the topic I was working on is

important and really at the fore. I attended many conferences and open seminars, including the Sustainability Research Day at KTH, the Conference “Your plate. Our planet” within Nobel week, open seminar “Changing what we eat – with the help of art, design and gastronomy” at Dome of Vision, the “Future



Energy” conference at KTH, a conference at Stockholm Chamber of Commerce about the Paris Agreement on climate change, the "Sustainable development and social entrepreneurship” seminar in Sigtuna, Youth Speak Forum, dedicated to Sustainable Development Goals at Stockholm University and others.

I had the opportunity to talk to and hold interviews with some professionals in this sphere. I had a useful meeting with Nadezda Maslova and Åke Mikaelsson from Swedish Environmental Protection Agency (Naturvårdsverket). They are working on the project called “waste management” in cooperation with Russia. I found out what this project is about and the difficulties that occur in practice, as well as about the current problems in cooperation. They also explained to me the Swedish interest in cooperation with Russia in the Baltic Sea region.

I also met with Åsa Stenmarck, from the Swedish Environmental Research Institute (IVL SvenskaMiljöinstitutet). She is working on three projects concerning plastic waste into

the Baltic Sea, bio-waste, and food waste. She shared her knowledge about Swedish waste management and gave me many recommendations.

Another interesting meeting was with Marianne Hultberg, who is a former employee of the Swedish Embassy in Moscow. We discussed the concept of “Zero Waste” and ways to achieve it, the role of the government and nongovernmental organizations, culture and mentality of society, countries’ identity and lifestyle of inhabitants.

I learned about the work of the Swedish Parliament (Riksdag) and Swedish Government, Swedish Waste Management and Recycling association (Avfall Sverige), the Swedish Recycling Industries' Association, the Packaging and Newspaper Collection Service (FTI AB), Keep Sweden Tidy (Hell Sverige Rent), Returpack AB, IKEA, H&M and others, and about responsibilities in waste management of municipalities, producers and citizens.

It was very interesting to explore Swedish culture and society, which I can say inspire me a lot and had a big influence on me. Swedes love their nature and care about it a lot in order to save it for future generation. Their love begins from sorting garbage at home, to buying and selling their belongings at flea-markets (loppis) and donating and buying things in second-hand shops. I was surprised how popular such practices are in Sweden. It was a pleasure to observe how the fashion industry promotes the ideas of sustainability and waste reduction and how museums are involved in helping to solve problem with waste by organizing special exhibitions. I think it is good that the government spends a lot of money on research in the spheres of sustainable development, circular economy etc. by financing research programmes and research institutes such as Mistra, Stockholm Resilience Centre, Stockholm Environmental Institute (SEI). Swedish universities offer a great deal in terms of study programmes about sustainable development, sustainable technology etc. All of this helps Sweden in achieving the Plan in Zero waste, which is almost complete.

At the end of my stay in Sweden, I had an open lunch-seminar at KTH, at the Division of Industrial Ecology, where I presented my research work called “What is behind Swedish waste management system: How is Sweden achieving the plan in Zero waste.” In this work, I analyzed the United Nation, European Union and Swedish national policy and legislation with examples from practice and real life.

I want say a special thank you to Disa Håstad, our Swedish mother! Thank you for gathering scholars at your home; for inviting us to a “tea-party”, where we had chance to meet the elite of Stockholm, including former ambassadors, and interesting artists and journalists; for an amazing Easter programme, where you drove us to the best places in Sweden, such as Skokloster castle, Hörkeberga church, Gripsholm castle, and of course, your dacha;| and for organizing the unforgettable meeting of “Sverker scholars” in Moscow, where we met each other and got to know the current Swedish ambassador in Moscow, Peter Ericson, personally.



I have grown to love Sweden very much. It is a beautiful country, with a very tolerant and progressive society. It offers libraries, museums and cultural events free of charge. It is the place where you can easily find new friends and future colleagues from all over the world. It is a place where the government is thinking about sustainable development and future generations, where the topic you are working on is considered very important. This

time in Sweden proved to be an invaluable experience, giving me food for thought and friends from Sweden, and all over the world, as well as from different parts of Russia.

Thank you all!

Hope to see you again and soon =)

From Siberia with Love

(Omsk, Russia, 20-06-2017)