# 6<sup>th</sup> World Conference on Climate Change

September 02-03, 2019 | Berlin, Germany

## Recycling of electronic battery by the households. Differences of awareness and active participation between Russia and leading-recycling European states

Sofya Khlebnikova

International University in Geneva (IUG), Switzerland

**Statement of the Problem:** Hazardous Households Waste presents a threat to the environment and to human health when the mixed garbage disposed of in landfills. In case of Russia, researchers have reported that at present, federal law does not regulate the management of waste batteries generated by the population, in particular, does not establish the requirement for their collection. Therefore, thrown into the household trash, batteries corrode and the toxins from metals go to the ground, water and the atmosphere. The number of oncological sicknesses has almost doubled in Russia in 2010 since the active use of Lithium batteries. Being strict on regulations, In Europe, in total, at least 40 processing plants operate, which utilise up to 45% of all chemical power sources. Switzerland itself shows a good level of public awareness, but low collection rates. Japan requires batteries to have so far been stored in warehouses in compliance with safety requirements. In Australia, the highest percentage of recycling of batteries - the number of recycled batteries reaches 80%.

**Methodology, Theoretical Orientation:** Intersubjective studies have been conducted with in-depth research in the core damages from the used batteries; moreover, with analysis of recent regulations on corporate and public levels and observation of public awareness and contribution to the recycling waste.

**Findings:** Awareness on the governmental level is high all over the world, as well as the regulations, applied overproduction and recycling by the industries give rise to corporate responsibility. However, the level of awareness in the population for the need for separation of waste as well as the toxic effect on the environment and human lives is different from country to country.

**Conclusion & Significance:** As each state differ, a Household Hazardous battery waste needs to be addressed and successfully regulated individually towards the nation's approaches and needs.



### **Recent Publications**

- 1. Vorotnikov, Vladislav. "Russia's Big Problem with Waste." Recycling and Waste World, 7 June 2018.
- 2. Kaushal, Rajendra Kumar, et al. Multi-Stakeholder Strategic Framework Interface for Portable Battery Waste Management. IAEME Publication,

### conferenceseries.com

# 6<sup>th</sup> World Conference on Climate Change

September 02-03, 2019 | Berlin, Germany

- 3. The Collection of Waste Portable Batteries in Europe in View of the Achievability of the Collection Targets Set by Batteries Directive 2006/66/EC. EPBAeurope.net/Perchards.com/SagisEPR.com, European Portable Battery Association (EPBA), 20 Aug. 2013,
- 4. Kattenburg, Kathy. "What Do Batteries Do to the Environment If Not Properly Recycled?" Education, 21 Nov. 2017,
- 5. The Museum of the Ilizarov Center Successfully Completes the Year of Ecology Russian Ilizarov Scientific Centre "Restorative Traumatology and Orthopaedics," 2017.

### **Biography**

Sofya Khlebnikova is an inspired research-oriented International Relations student with a passion for improving human behaviour towards environmental conditions which affect the health of human beings in return. The evaluation of different countries' legislation, public awareness, and constructing possible plans for action looking at analysis of each solution are the main leading skills possessed that are successfully utilized in this work. With a lead and support of the respected Nadezhda BYCHKOVA, retired Head of the Department of Pedagogical Support and Rehabilitation of the Ministry of Education and Science of the Republic of Tatarstan in Russia, with the doctorate degree in atomic physics, Sofya was able to see the position of a policy-maker experienced in Russian Governmental Structure and provided with a scientific outlook on the issue. Nadezhda provides open-minded critics based on years of experience in research, teaching and administration both in educational institutions and federal governing body.

### Notes: