

Abstract

Used cooking oil is currently a very little solved topic in area of handling municipal waste. It has not been deal with this in legislative yet so it is really important to look for solution how to collect used cooking oil from household and how to use it again. Used kitchen oil is produced in households during frying. In these days some villages and cities have special places where can be used cooking oil collected, but there are not many of them. Ministry of the Environment establishes an obligation to sort the used cooking oil in cities of the Czech Republic.

. First part of this thesis examines how used kitchen oil can be utilized. It can be used in waste-to-energy facilities, in biogas plants, can be converted to biodiesel or can be used as culture medium for the production of bioplastics. Second part shows how used cooking oil is separated and cities which option of separation is the best from economical and practical point of view. There are collections points in public places like supermarket in Austria. People can simply exchange full jar for empty one. Next good solution is location of collections points in companies and schools, because they are daily visited by people.

Third part is focused on questionnaires survey. First questionnaire it is aimed on villages and cities. Second on inhabitants of the Czech Republic. In survey aimed on villages and cities it is examined whether they have collections points for used cooking oil or not. Questionnaires for citizens are focused on their awareness about this issue. What they do with used cooking oil and in what conditions they are willing to used cooking oil take to collections points. Questionnaires show that people do not even know they can sort this waste. So they put used cooking oil into sewerage or they throw it into municipal waste. If villages or cities would have collections points for used cooking oil people are willing to sort it. Citizens prefer collections points for used cooking oil in the same locations where are the containers for sorted waste. The awareness about this issue is very low and it is necessary to increase it.

Keywords: used cooking oil, separate collection, waste management, waste