

# EcoWatch — a Social Mobile Service for Environmental Monitoring

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## Abstract

Modern mobile technologies can be used for increasing of interaction efficiency between citizens and local governments in solving of local environmental problems. With the smartphone, the user can operatively inform on the found out problem, whether it be an illegal parking on a lawn, an unapproved dump or emissions of chemical substances. As the majority of modern smartphones are equipped by cameras users can provide photos with issue reports. These reports can be taken into account by authorities and responsible organizations, e.g. police or housing-and-municipal services. Other volunteers can fetch the information about issues located nearby from the backend store and provide their own comments and photos ("vote for a problem" to some extent).

This idea is implemented in EcoWatch service. The service includes two program components: the EcoWatch mobile application and a backend, which is used to store issues details such as coordinates, user comments, photos and statuses (new, in work and solved). Currently the Symbian version of EcoWatch application is implemented. The QML language was used. Current version of the application uses My Territory API (StreetJournal.org) as a backend.

Another feature of the application is the possibility to mark locations of toxic waste such as energy-safe bulbs and waste paper collection points.

In the future we plan to port the app to Android platform. Also the implementation of our own backend and web application is our next milestone.

**Index Terms:** environmental, mobile, QML, LBS.