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**Why the European Machinery and Equipment Industry would switch to Circular Economy:
Environmental, social and economic aspects**

As the Circular Economy is praised by many to be the future economic model, many decision-makers look at the opportunities of such a model and how to encourage the industries to switch to a circular model. The European Union in the context of the European Green Deal has the objective to make the European economy circular. To make it possible the Circular Economy Action Plan was created to make actors of the European economy switch to a circular model. However, just few European businesses switched to the Circular Economy so far and the largest portion does not seem to be willing to change. In a context of urgency for environmental measures and sustainable strategies to protect either the nature and humankind such behaviours seem reckless but are motivated for specific reasons. Each industry faces different challenges and has specific needs. This thesis focusses on one industry, the Machinery and Equipment Industry, and seeks to understand how and under which conditions it could switch to Circular Economy. Several factors including economic, biophysical, cultural, technological and regulatory factors are considered and tested in order to answer this question.

In a first part this thesis analyses the Machinery and Equipment Industry in the European Union to gain a deep understanding and shows that remanufacturing activity is the most effective circular technique that can be applied in the Machinery and Equipment Industry. A second part bases its analysis on three case studies, three Austrian companies competing in the Machinery and Equipment Industry; expert interviews have been conducted with representants of these companies. Those interviews in the context of an empirical research confirmed most of the reasons present in the literature to switch to Circular Economy, namely the high EROI, the cost savings of circular technics, the circular culture, the need for better regulations and support in the transition. On the other hand, this research also reveals specific needs and claims of the Machinery and Equipment Industry to switch to a Circular Economy model based on remanufacturing activity, namely the low interest in financial support but rather the call for strong regulation, the desire to gain more knowledge concerning what the Circular Economy is doing and how it is working and the need of a good relationship with or strong influence on the suppliers in order to conduct a remanufacturing activity.

This thesis draws a picture of the most important factors for the Machinery and Equipment Industry to switch to Circular Economy under the given research limitations and aims to be an invitation to conduct further research on this topic in order to greater develop the testing of variables and confirm or challenge the found results.