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## HYPOTHESES OF THE DISSERTATION

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### **HYPOTHESIS 1:**

THE PHYSICAL DESCRIPTION AND QUANTIFICATION OF THE PROCESSES IN THE SOCIAL AND INDUSTRIAL METABOLISM ENABLES THE ESTABLISHMENT AND FOLLOW-UP OF SUSTAINABILITY AND ENVIRONMENTAL POLICY GOALS.

### **HYPOTHESIS 2:**

THE DIFFERENT METHODOLOGIES OF MATERIAL FLOW ANALYSIS ARE EFFECTIVE TOOLS TO TRACE THE PHYSICAL PROCESSES OF THE SOCIAL AND INDUSTRIAL METABOLISM.

### **HYPOTHESIS 3:**

AGGREGATED DESCRIPTION OF PHYSICAL LINKS BETWEEN THE SOCIO-ECONOMIC AND ENVIRONMENTAL SYSTEMS CAN BE FACILITATED BY THE COMPILATION OF ECONOMY WIDE MATERIAL FLOW ACCOUNTS. THE HUNGARIAN STATISTICS PROVIDE SUFFICIENT DATA TO COMPILE THE ACCOUNTS AND MAIN MATERIAL FLOW INDICATORS AT LEAST PARTIALLY.

### **HYPOTHESIS 4:**

THE MATERIAL FLOW ACCOUNTS OF HUNGARY MAY PROVE THAT THE NATIONAL ENVIRONMENTAL RESOURCE MANAGEMENT IS UNSUSTAINABLE. THE ACCOUNTS SHALL FACILITATE THE IDENTIFICATION OF THOSE UNFAVOURING TRENDS WHICH SHOULD BE ALTERED BY SUSTAINABILITY POLICIES.

### **HYPOTHESIS 5:**

THE INFORMATION THAT CAN BE DERIVED FROM SUBSTANCE FLOW ANALYSES SHALL FACILITATE THE PHASE OUT OF HAZARDOUS SUBSTANCES FROM THE SOCIO-ECONOMIC SYSTEMS, THEREFORE THE EXTENSION OF SUCH ANALYSES TO A EUROPEAN LEVEL IS JUSTIFIED.

### **HYPOTHESIS 6:**

A SIMPLIFIED SUBSTANCE FLOW ANALYSIS METHODOLOGY CAN BE APPLIED BASED ON MATERIAL FLOW ACCOUNTING. THIS NEW METHODOLOGY CAN BE APPLIED TO TRACE MERCURY FLOWS AT LEAST PARTIALLY IN HUNGARY SERVING FOR THE BASIS OF A FUTURE STRATEGY ON MERCURY PHASE OUT.