



Co-funded by the Intelligent Energy Europe
Programme of the European Union



Project title: RES Heating and Cooling – Strategic Actions Development

Acronym: RES H/C SPREAD

Project No. IEE/13/599/SI2.675533

Regional Maps of excess heat

Author: Austrian Energy Agency

Version: June 2016



The sole responsibility for the content of this report lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EASME nor the European Commission are responsible for any use that may be made of the information contained therein.

Table of contents

1	Introduction.....	3
2	Infrastructure of the target regions	4
3	Excess heat all.....	5
4	Excess heat high potential	6

1 Introduction

a) Data collection procedure

The excess heat potential is assessed according to the methodology described in **Error! Reference source not found.** After the selection of relevant industries with the help of data from “Stratego” as well as literature data and expert decision, concrete facilities have been searched in the WKO-database, a company directory for all businesses in Austria compiled by the WKO (Austrian Chamber of Commerce). Within this database, the different entries can easily be filtered by name, province, postal code, branch or type of industry including different subcategories etc. The data has been quality-assured by the CGC and local/regional stakeholders. In addition, a visual assessment based on orthofotos has been done.

b) Sources of data available used

The main data used are the WKO-Database and data from expert interviews with local stakeholders.

c) Calculation method adopted

A concrete methodology for assessing the excess heat potential has been elaborated (see “RES H-C mapping methodology”). Once the addresses with great excess-heat potential have been selected, the concrete numbers are examined with a questionnaire and double checked with the help of the company involved. The following parameters have to be taken into account: ventilation systems, air-conditioning units, compressors, exhaust emissions, process water, wastes as well as the demand for space heating, warm water demand, process heat demand etc.

d) Limits of this methodology

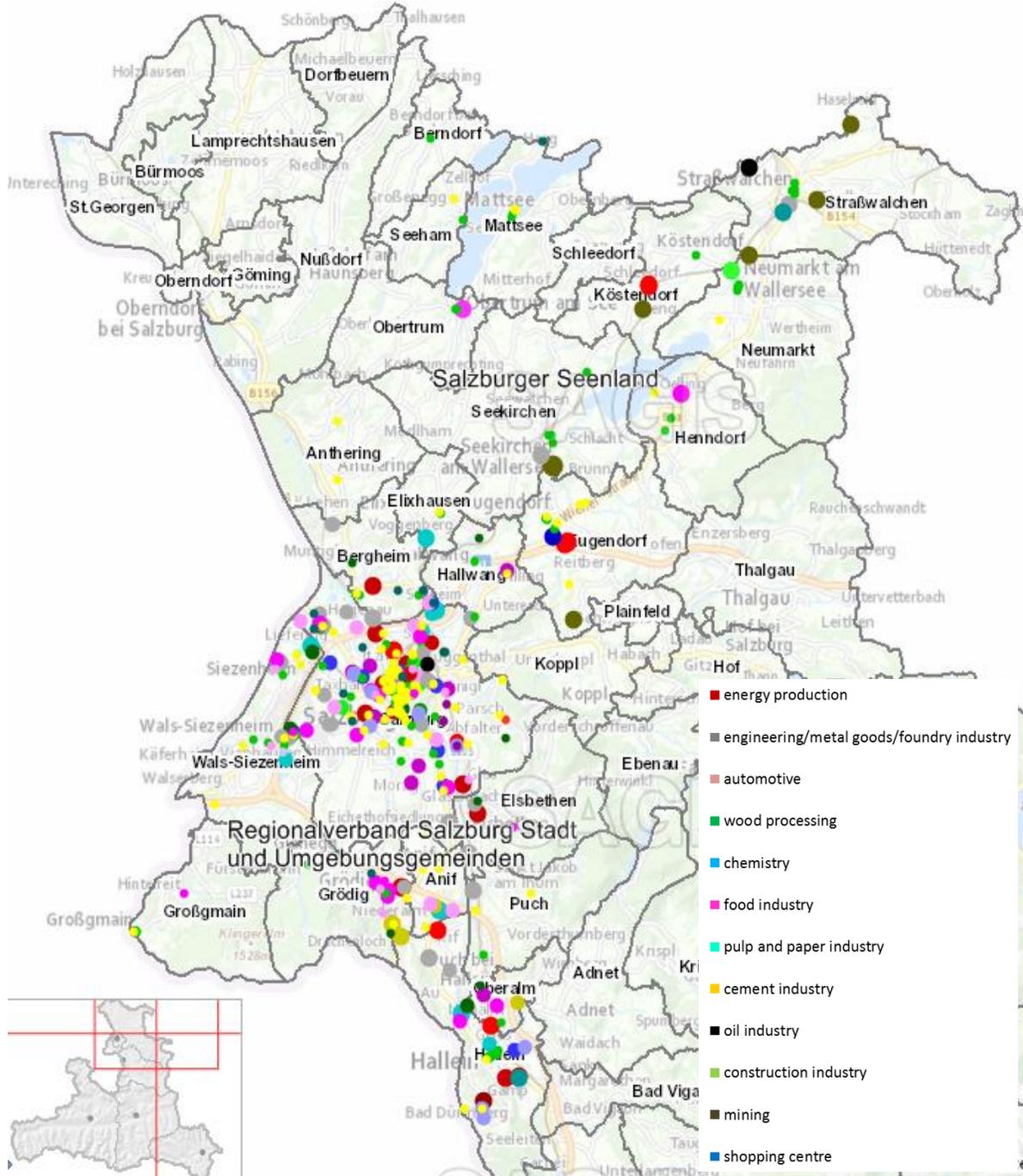
This methodology provides very precise results but can also be time-consuming. It is necessary to discuss the selection of facilities with experts (local stakeholders) and to contact the most interesting ones. Depending on the size of the region under study as well as on the relevant facilities identified, other (more general) approaches might be more useful.

2 Infrastructure of the target regions



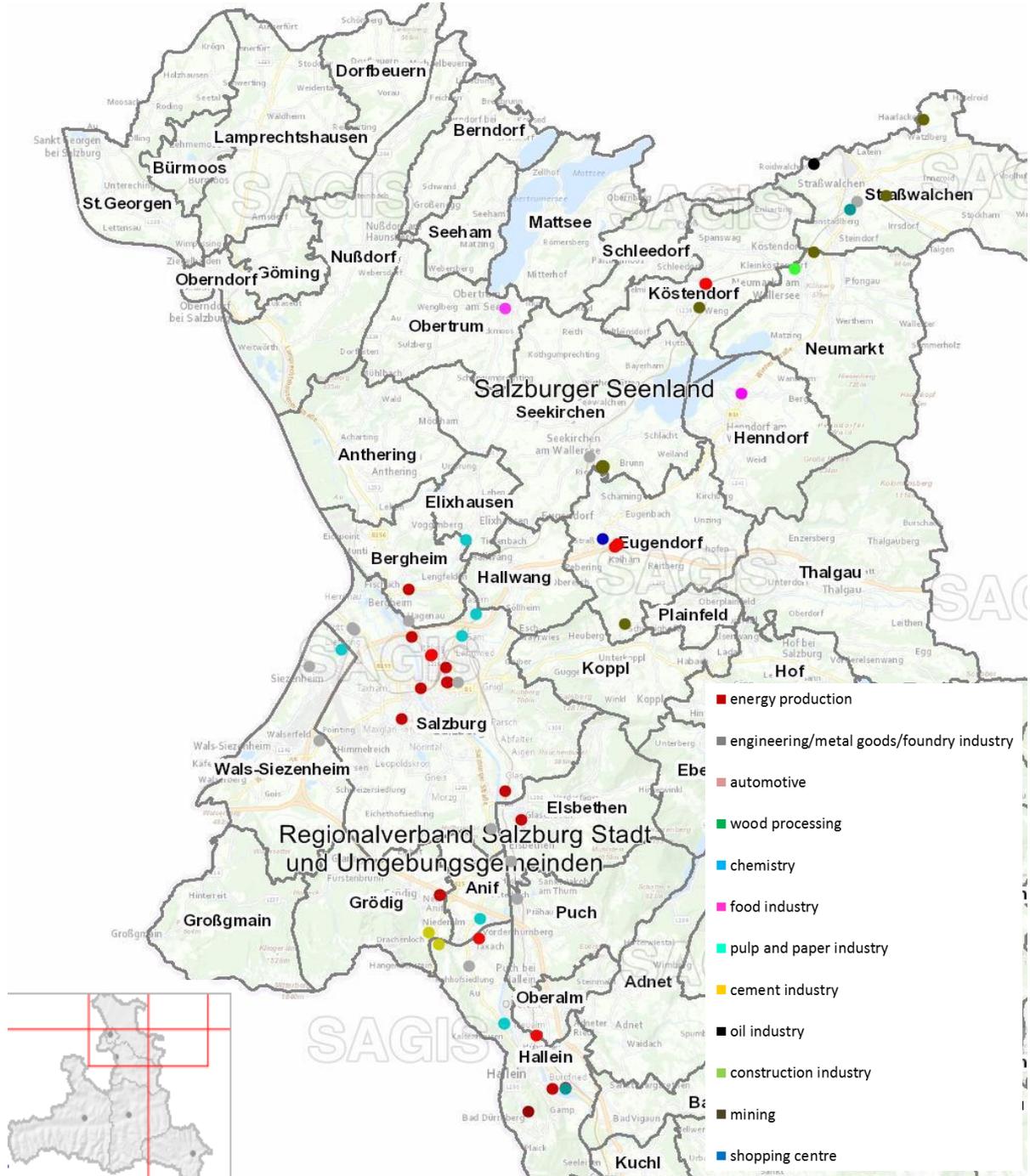
Infrastructure of the target region is characterized by the Alps in the south and open land in the north and northeast. The Untersberg near Grödig forms the end of the Northern Limestone Alps and the landscape turns into the Salzburg Basin and the broad valley of the Salzach river. The City of Salzburg and includes the rural region Salzburger Seenland in the northeast. This valley landscape is highly structured and characterized by lakes, woodland and agriculture. Due to this background, several municipalities especially around the lakes focus on tourism and agriculture while other ones, more urban regions close to Salzburg, are engaged in service industries.

3 Excess heat all



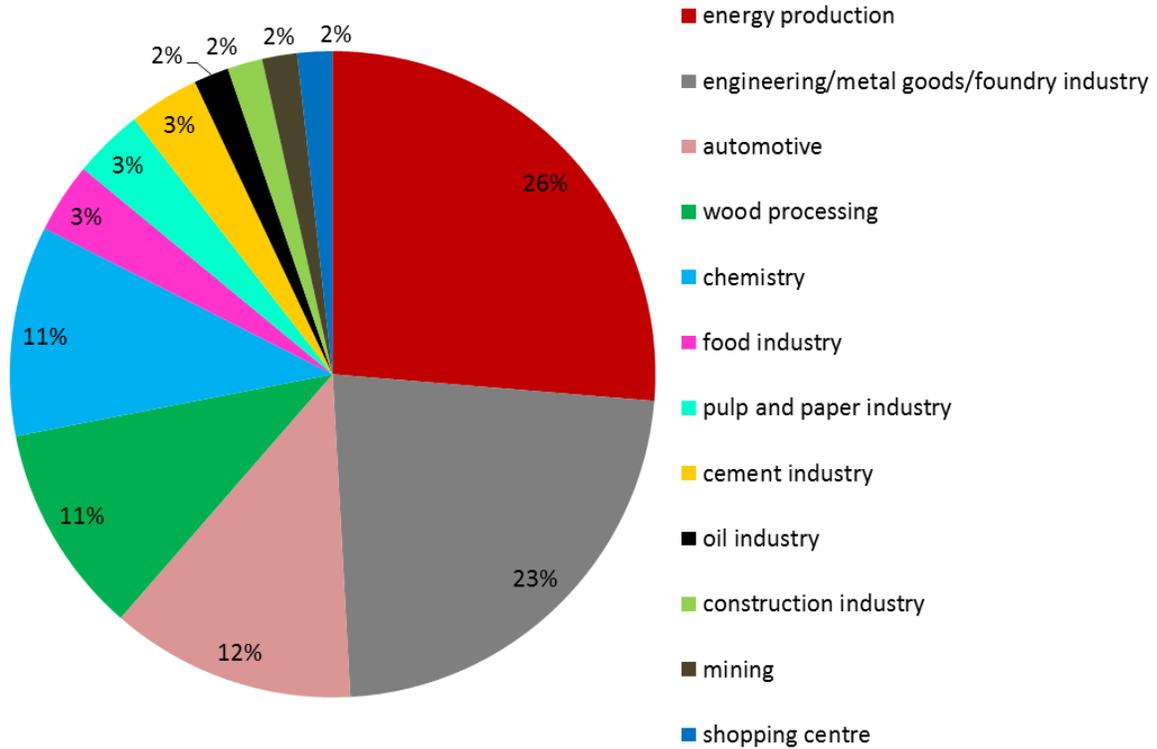
Overall, more than 400 facilities have been assessed and located in GIS-based maps.

4 Excess heat high potential



In total, 57 addresses with “high”-excess heat potential have been identified and showed on the map, mostly in the branches energy production as well as engineering/metal goods/foundry industry.

branches with "high" excess heat potential



Distribution of branches with high excess heat potential shows high excess heat potentials in the sectors energy production and heavy industries. This is caused by their high number and large size within the area. For concrete planning the potentials have to be examined in more detail and assessed according to availability and distances.