

## I. IDENTIFICATION DATA

<b>Thesis title:</b>	<b>Design of an Energy Independent Household</b>
<b>Author's name:</b>	<b>Gaurav Singh</b>
<b>Type of thesis :</b>	bachelor
<b>Faculty/Institute:</b>	Faculty of Mechanical Engineering (FME)
<b>Department:</b>	Energy Engineering, 12115
<b>Thesis supervisor:</b>	prof. Ing. Jan Hrdlička, Ph.D.
<b>Supervisor's department:</b>	Energy Engineering, 12115

## II. EVALUATION OF INDIVIDUAL CRITERIA

<b>Assignment</b> <i>How demanding was the assigned project?</i>	<b>ordinarily challenging</b>
The thesis is focused on fundamental literature review and energy/mass balances for the electricity and heat supply of a household, which can be considered as ordinarily challenging for the bachelor degree thesis.	

<b>Fulfilment of assignment</b> <i>How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.</i>	<b>fulfilled</b>
I can consider all points of the thesis assignment as fulfilled.	

<b>Activity and independence when creating final thesis</b> <i>Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.</i>	<b>A - excellent.</b>
The author was able to work fully independently and has been consulting the progress of his work on regular basis.	

<b>Technical level</b> <i>Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?</i>	<b>A - excellent.</b>
The thesis is generally well elaborated, the author has to study himself certain parts of literature sources beyond the typical knowledge in the bachelor level courses. There are no significant shortcomings, the thesis could be potentially improved by a deeper discussion of the results	

<b>Formal level and language level, scope of thesis</b> <i>Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?</i>	<b>B - very good.</b>
The thesis is written in good English, and is generally well understandable as well as the extent is sufficient for the bachelor level thesis. At some points, the graphical presentation could be improved for a better clarity for a reader.	

<b>Selection of sources, citation correctness</b> <i>Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?</i>	<b>A - excellent.</b>
I don't see any problem with citation ethics in the thesis, all literature sources used in the text are referenced. The choice of the sources corresponds well to the topic of the thesis.	

<b>Additional commentary and evaluation (optional)</b> <i>Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.</i>
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None.

### III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

*Summarize your opinion on the thesis and explain your final grading.*

The thesis is generally a good piece of work that has been elaborated independently by the author and has not required any major corrections from the side of the supervisor. The thesis provides a good insight into the off-grid energy supply for a household and presents optional scenarios to fulfill the energy demands. I can recommend the thesis for approval.

The grade that I award for the thesis is A - excellent.

Date: **18.6.2021**

Signature: