CHAPTER VI

CONCLUSION AND RECOMMENDATION

6.1 Conclusion

Based on the result and discussion above, it can be summed up that the solution or propose alternative derived was building the new installation of centralized chiller in SPS 1 area. The initial system keeps the water supply tank in each of cooling tower so that it consumes large electricity and not efficient. That is why the production was frequently experiencing the breakdown and diminish the productivity. Then, it comes to the new idea of installing the center-water supply tank that will be circulated to other cooling component such as cooling tower, AHU and FCU to keep the room of screw cap in humid and under set temperature control. The propose of alternative method also to attain the energy and cost-effectiveness that can reduce up to 38.3% of energy consumption simultaneously reducing the operational cost. By applying this alternative, the manufacturer will a double beneficial in economical and ecological sides. It preserves the earth and maintain the financial wealth. In shortly, the manufacturer can achieve sustainability.

6.2 Recommendation

The recommendations are derived based on the previous discussion that addressed to the manufacturer, PT. Tirta Investama Klaten and the further researcher, as below:

6.2.1 For PT. Tirta Investama Klaten
1. The company can consider applying the similar alternative to other manufacturing plant area.
2. The company can record and report energy consumption regularly to avoid the breakdown and keep the productivity so that it would not interrupt the production process.

6.2.2 For Further Researcher

1. To obtain optimal result, it needs other parameters in modeling LCA such as the cut-off, geographical issues, value added, uncertainty and more.
2. In completing the Eco-efficiency assessment, some of the LCIA (Life Cycle Impact Assessment) method should be involved such as acidification, freshwater ecotoxicity, ionizing radiation, ecological scarcity and many more. Also can perform different type of LCIA method to compare and analyze more to impact categories.
3. The end-of-life management should be taken into account since it also part of LCA – depends on system boundary-, such as the incineration, recycling process to manufacturing facility should be included.