SUPER GLOBAL HIGH SCHOOL

Aiming for further spread zero energy at schools

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No.2728

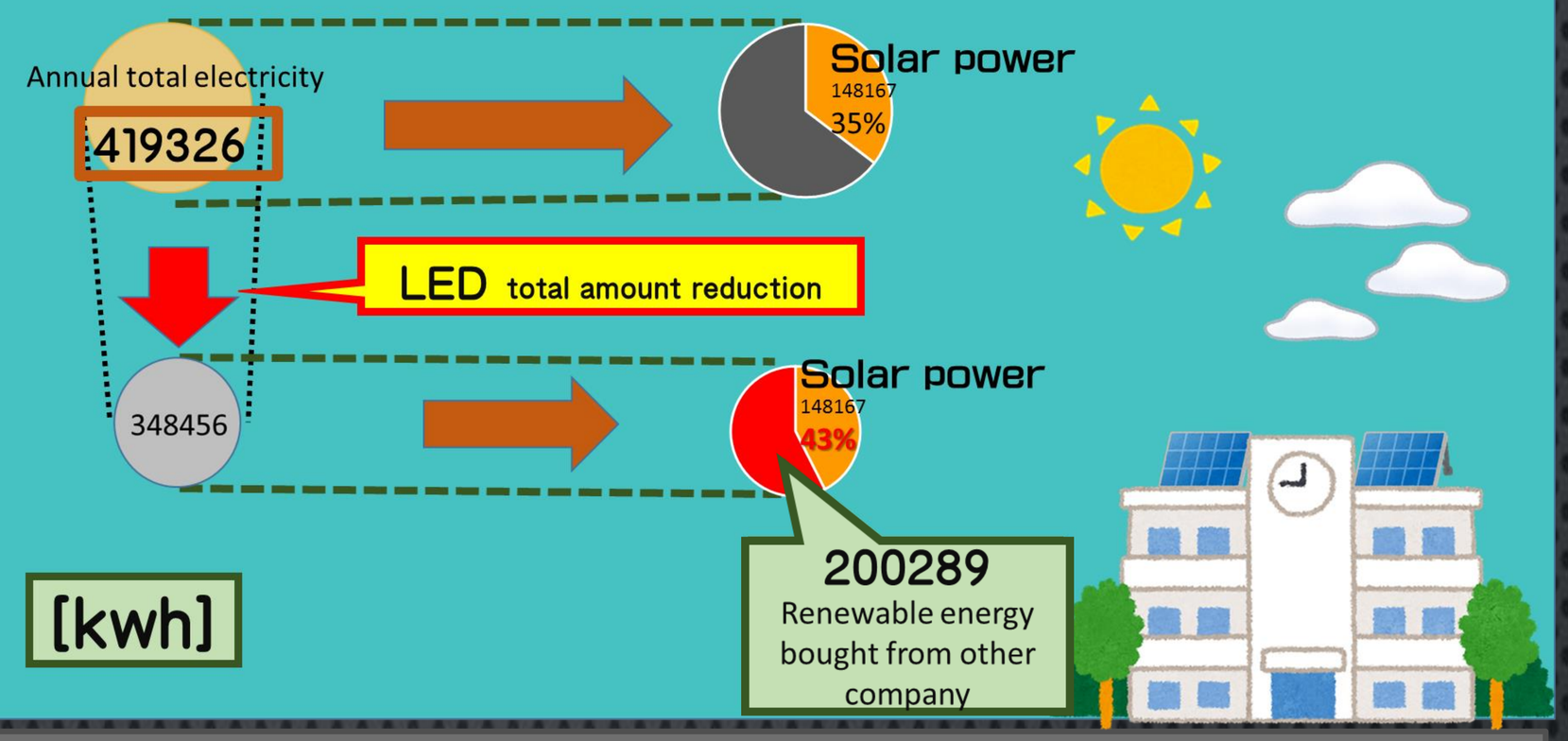
ZERO ENERGY SCHOOL

The progress of global warming has become a serious problem in the world. Renewable energy is not widely used in Japan compared to other countries in the world. So in this study, we aim the target which public facilities like school consume zero fossil fuels.

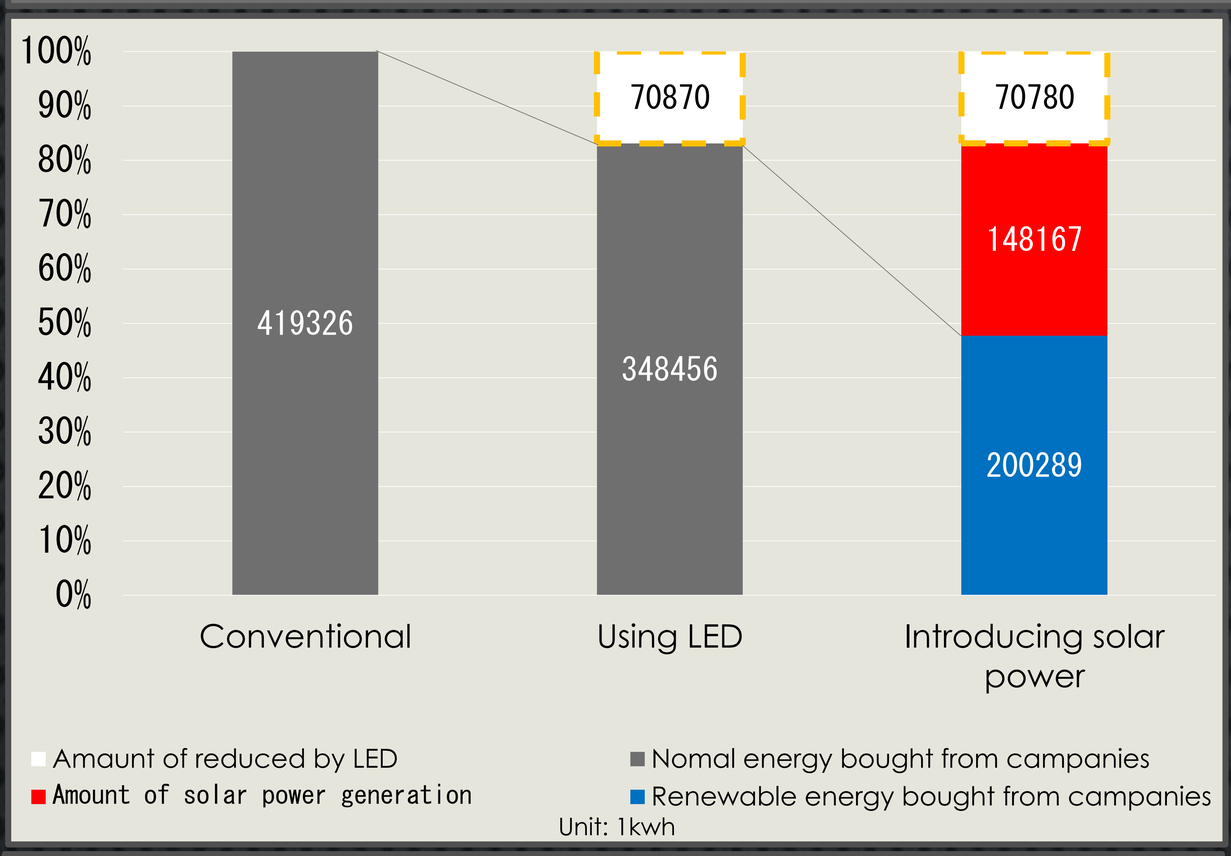
Method

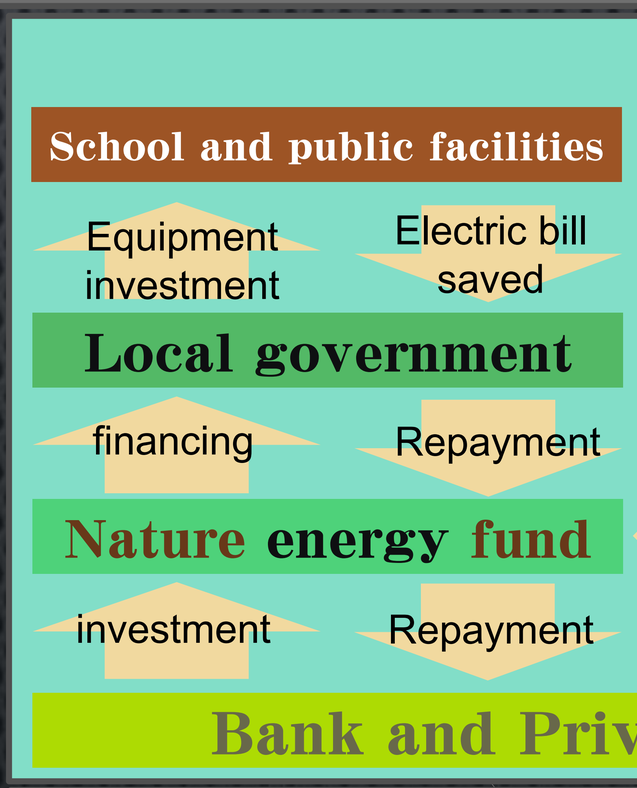
1. Field work to Osaka prefecture government
2. How to secure financial resources
3. Cost for introducing solar panels
4. Change the light to LED

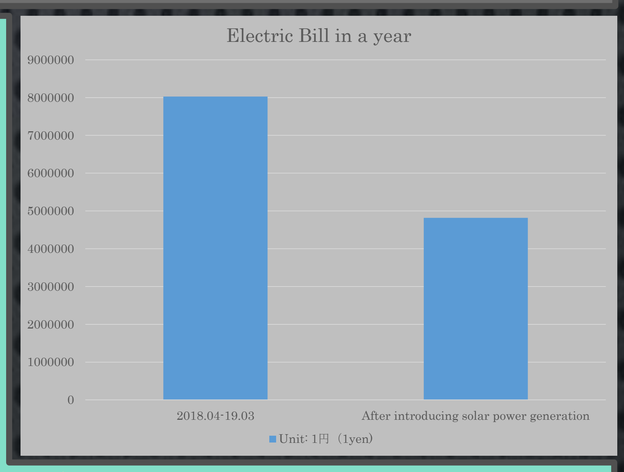
Our school annual electricity consumption



Result







2018.04-2019.03：
(13.08+1.79+2.90)×419,326kwh+(47,919.60×12)=8,026,458

After introducing solar power generation：
(13.08+1.79+2.90)×(419,326-148,167)kwh+(47,919.60×12)=5,393,530

8,026,458-5,393,530=2,632,928
40,000,000÷2,632,928=14.46

The fund can recoup its investment in 14.4 years.

The cost of achieving zero energy within the facility would be enormous. Therefore, by combining energy creation and energy saving, more than 50% will be provided in the facilities.

By combining the rest with renewable energy from off-site power companies such as large-scale solar and wind power generation, zero energy can be realized while reducing installation costs.

Conclusion

1. Utilize private capital
2. Spread quickly
3. ZERO ENERGY SCHOOL is feasible

NEXT STEP
1. Emergency generator
2. Battery for bad weather

Reference

Ministry of Education, Culture, Sports, Science and Technology (文部科学省) (2014). The report of Zero Energy School Promotion Committee
Osaka Prefectural Government (大阪府) (2014). Osaka Energy local production for local consumption action program.