

NATIONAL TAIWAN UNIVERSITY

Regulations for the Energy Conservation Incentive Awards

December 28, 2010 Passed by the 2,651st Administrative Meeting

- Article 1 National Taiwan University (NTU or “the University”) formulates the NTU *Regulations for the Energy Conservation Incentive Awards* (“the Regulations”) to effectively reduce power consumption and encourage its faculty members and students to conserve energy.
- Article 2 Incentive award applications shall be submitted by preliminary processing units within the application time frame announced by the Office of General Affairs. The applications shall then be reviewed by the final processing unit—the Energy Conservation—and, if passed, forwarded to the NTU Energy Management Group for a re-review.
- Article 3 Each applying unit shall submit an energy conservation report (see the Appendix for a format guide) by the announced application deadline (please exclude any power consumption expenses that are funded by a dedicated budget). The report shall include the following details:
1. Actual air-conditioning, lighting, public infrastructure, and other energy conservation management measures implemented by the applying unit, with photographic evidence (35%)
 2. Calculation and supporting explanation of energy conservation efficacy, including reduction in the consumption of power, usage of other forms of energy and resources, and CO₂ emissions (35%)
 3. Future energy conservation plans (30%)
- Article 4 To facilitate review, the Energy Management Group may appoint a certain number of internal or external experts and scholars to a review committee, with the Vice President for General Affairs serving as convener.
- The review committee, as described in the preceding paragraph, may only convene with more than half of its members present. The committee shall assign a score for each of the evaluation items stipulated in the preceding article and rank the applying units based on their total scores. Units that receive a score of 70 or higher may be eligible to receive an incentive award, which may be left vacant if no units are eligible.
- Article 5 For units with outstanding energy conservation results, the Office of General Affairs shall issue the incentive award in the form of electricity bill deductions as provided below:
1. First place: NT\$500,000 and a medal
 2. Second place: NT\$400,000 and a medal
 3. Third place: NT\$300,000 and a medal
 4. Honorable mention (7 awards): NT\$100,000 per award
- Units with outstanding energy conservation results may issue an appropriate incentive award to meritorious personnel.

Article 6 The Regulations shall be approved by the NTU President and then implemented on the date of promulgation.

Note: Use A4 paper and print on both sides. Up to 30 pages are allowed (excluding appendices). Please prepare 10 copies. Include a table of contents, pagination, and a cover page. Staple on the left. Use Times New Roman font, with chapter titles set to 16 points, section titles to 15 points, and body text to 14 points. **[Remove these notes before submitting the application.]**

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○○○○ [Final processing unit]

○○○○ [Preliminary processing unit]

Energy Conservation Report for Year ○○○

Responsible person at the final processing unit: ○○○○○○○○

Contact number for the final processing unit: ○○○○○○○○

Applicant at the preliminary processing unit: ○○○○○○○○

Contact number for the preliminary processing unit: ○○○○○○○○

Month and year: ○○ ○○

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Chapter I. Energy Conservation Measures Already Implemented

1. Air-conditioning:

1) ○○○○○○○○

2) ○○○○○○○○

3) Photos:

[Please include a caption.]	[Please include a caption.]
[Please include a caption.]	[Please include a caption.]

2. Lighting:

1) ○○○○○○○○

2) ○○○○○○○○

3) Photos:

[Please include a caption.]	[Please include a caption.]
[Please include a caption.]	[Please include a caption.]

3. Public infrastructure:

1) ○○○○○○○○

2) ○○○○○○○○

3) Photos:

[Please include a caption.]	[Please include a caption.]

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[Please include a caption.]	[Please include a caption.]

4. Other management measures:

1) ○○○○○○○○

2) ○○○○○○○○

5. Photos:

[Please include a caption.]	[Please include a caption.]
[Please include a caption.]	[Please include a caption.]

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Chapter II. Energy Conservation Efficacy Calculation and Description

1. Reduction in power consumption:

1) ○○○○○○○○

2) ○○○○○○○○

2. Usage of other forms of energy and resources: [such as water, petroleum oil, etc.]

1) ○○○○○○○○

2) ○○○○○○○○

3. Calculation of CO₂ emissions reduction: [Please refer to the Appendix or the Industrial Energy Saving and Carbon Reduction Information Web maintained by the Bureau of Energy, Ministry of Economic Affairs.]

1) ○○○○○○○○

2) ○○○○○○○○

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Chapter III. Future Energy Conservation Plans

1. ○○○○○○○○:
 - 1) ○○○○○○○○
 - 2) ○○○○○○○○

Description of emission coefficient

Energy form	Conversion coefficient		Calculation method
Oil	Fuel oil	2.26 kg CO ₂ /L	Please refer to the CO ₂ emission coefficient for fuel combustion and power consumption published by the Bureau of Energy, Ministry of Economic Affairs ^[1]
	Diesel fuel	2.61 kg CO ₂ /L	
Electricity	0.623 kg CO ₂ /kWh		$\frac{\text{Total CO}_2 \text{ emissions by power plants} - \text{CO}_2 \text{ emissions attributable to line losses}^{[2]}}{\text{Total electricity sales}}$ <p>Total CO₂ emissions by power plants = Total CO₂ emissions by utility power plants + Total CO₂ emissions by private power plants + Total CO₂ emissions by cogeneration plants.</p>
Gas	Natural gas	2.09 kg CO ₂ /M3	Please refer to the CO ₂ emission coefficient for fuel combustion and power consumption published by the Bureau of Energy, Ministry of Economic Affairs ^[1]
	LPG	1.75 kg CO ₂ /kg	
Water	0.195 kg CO ₂ /kWh		$\frac{\text{Total CO}_2 \text{ emissions attributable to power consumption (kg)} + \text{Total CO}_2 \text{ emissions attributable to oil consumption (kg)}^{[3]}}{\text{Total water supply (cubic meter)}}$

[1] Bureau of Energy, Ministry of Economic Affairs, 2010: CO₂ emission coefficients for fuel combustion and power consumption.

[2] Taiwan Power Company, 2009: Emissions coefficient for power consumption
<<http://www.taipower.com.tw/TaipowerWeb/upload/files/1/d99051202.pdf>>.

[3] Taiwan Water Corporation, 2009: <http://www.water.gov.tw/04service/ser_c_main7.asp>.