



Brandeis University

ENERGY CONSERVATION AND MANAGEMENT POLICY

PRESIDENT'S TASK FORCE ON CAMPUS SUSTAINABILITY
JUNE 2016

Sustainable Brandeis

PRESIDENT'S TASK FORCE ON CAMPUS SUSTAINABILITY

2015-2016 MEMBERS

CO-CHAIRS

James Gray, Vice President
for Campus Operations

Matt Smetana '17, Brandeis
Senate Sustainability
Committee Chair

Sabine von Mering
Professor of German, and
Women's, Gender and
Sexuality Studies

Bill Bushey, Energy
Manager

Bob Avalor, Executive
Director of Facilities
Services

Jamele Adams, Dean of
Students

Peter Giumette, Senior
Advisor to the President

Dan Feldman, Vice
President for Planning and
Institutional Research

Kate Salop, Senior
Administrative Dean at
Brandeis IBS

Jarret Bencks, News and
Communications Specialist

FACULTY

Laura Goldin, Professor of
the Practice of
Environmental Studies

Dan Perlman, Professor of
Biology and Environmental
Studies

Eric Olson, Senior Lecturer
at the Heller School

Cameron Anderson,
Assistant Professor of
Theater Arts

Paul Miller, Associate
Professor of Biology

Judith Herzfeld, Professor of
Biophysical Chemistry

Carol Osler, Professor of
Finance at Brandeis IBS

STUDENTS

Sophie Freije '17

Teleah Slater '16

Ray Trott '16

Stephen Alkins

Roger Perez

Pallavee Panchal

Philip Wight

STAFF

Mary Fischer, Sustainability
Manager

Contents

INTRODUCTION	3
1. INDOOR AIR TEMPERATURE.....	5
A. ADMINISTRATIVE/ACADEMIC BUILDINGS	6
B. RESIDENCE HALLS	7
C. HOLIDAYS AND BREAKS.....	8
2. MEASURES TO INCREASE THERMAL COMFORT DURING PERIODS OF SUSTAINED HEAT	9
3. SUPPLEMENTAL HEATING AND COOLING DEVICES	10
4. OCCUPANT AND SUPERVISOR RESPONSIBILITIES	11
5. TURN IT OFF DAYS	12
6. ROOM RESERVATIONS FOR MEETINGS, CONFERENCES AND EVENTS	13
7. ENERGY EFFICIENT EQUIPMENT.....	13
8. VEHICLE IDLING	14
APPENDIX A: Temperature policy review	15
APPENDIX B: 1996-1997 Brandeis University Heating Policy	16

INTRODUCTION

In 2009, Brandeis University committed to reducing its carbon footprint across campus. Effective energy conservation and management is a major opportunity to reduce that footprint. In 2015, the University re-committed to this goal, which underscores our belief in the power, potential, and imperative of higher education's key role in shaping a sustainable society.

The University is deeply concerned about the increasing pace and intensity of global climate change and the potential for unprecedented detrimental impacts. Furthermore, we understand that our greatest, most immediate opportunity to reduce our own impact is in reducing our fossil energy usage in campus buildings (Fig. 1).

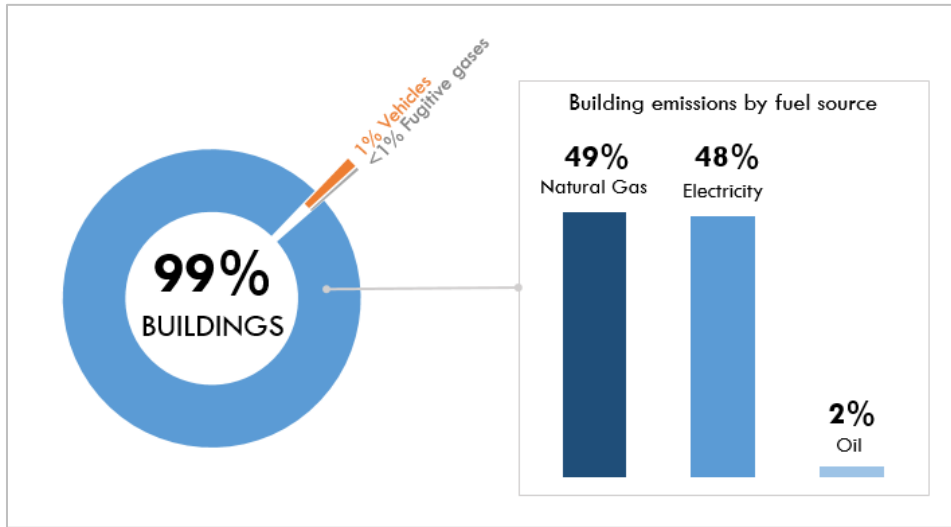
Interim President Lynch has called on the President's Task Force on Campus Sustainability to help reduce the University's carbon footprint, and the community has shown support for greater strides in energy conservation as well. In the 2015 Campus Operations Survey, many comments indicated a need for the University to increase efforts to conserve energy.

Extensive research shows that our campus uses 25-30% more energy per square foot than comparable campuses in our climate zone (Fig. 2), and the vast majority of Brandeis's emissions are caused by our building energy use. These facts, combined with the inextricable link between climate change and social justice, amount to a call to action for our community to greatly improve our approach to energy management.

We acknowledge and agree that campus as a place of work, and as a home to many of us, needs to meet reasonable standards of comfort to allow us to enjoy our time at Brandeis and to be productive. We seek to properly balance that essential goal with the critical goal of a reduced carbon footprint for the University.

This document outlines several ways in which our community must work together to improve our collective experience with our facilities in a way that is consistent with our commitment to sustainability.

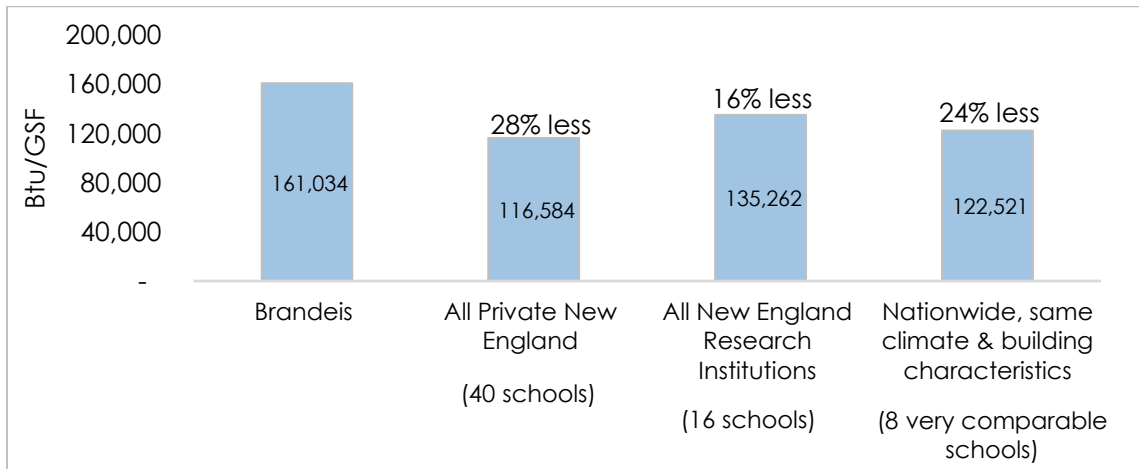
Fig. 1. Brandeis University Scope 1 and 2 Emissions by Source, 2015¹



Nearly 90% of Brandeis' carbon emissions are from scope 1 and 2 sources, and 99% of those sources are gas and electricity use by our buildings.

Fig. 2. Brandeis vs. Peer Groups Energy Usage Comparison

British thermal units (BTU) in gas + electric per gross square foot (GSF)



Data shows that our campus is vastly more energy consumptive per square foot than other universities in our climate zone with similar physical plants.²

¹ SCOPE 1 includes stationary combustion (use of natural gas and oil in onsite equipment such as the central heating plant, residential heating, boilers, water heaters, etc.); fuel used by university-owned vehicles; and refrigerants used in the operation of on-campus refrigeration equipment. SCOPE 2 includes purchased electricity.

² Source: Data provided by Sightlines and APPA

1. INDOOR AIR TEMPERATURE

The University recognizes that exact temperature control is not always possible given the varying level of sophistication and condition of our campus buildings. The goals of these indoor air temperature targets are to improve overall satisfaction with campus heating and cooling from current low levels of 40-50% based on the 2015 Campus Operations Survey, provided occupants are dressed appropriately for the space; to keep temperatures consistent; and to save energy by avoiding over-heating and over-cooling.

Reports of temperatures outside these ranges should be directed to Facilities Services via an [online work order request](#) or by calling x6-8500.

TEMPERATURE SUMMARY³

Below is the summary of the target air temperatures and set points that the University will follow. Details on residence halls and academic/ office buildings follow in sections A and B.

	Winter	Summer
	mid-October to mid-May	Mid-May to mid-October
Target air temperature when <u>occupied</u>	68-71° F (20-22° C)	74-76° F (23-24° C)
Thermostat set point when <u>unoccupied</u> *	50° – 55°⁴ (10-13° C)	80° (27° C)

*Depending on the requirements of the individual space

ADDRESSING SUMMER OVER-COOLING

Several comments on the Campus Operations Survey indicated that freezing office temperatures during summer lead many occupants to use space heaters.

Space heaters work against central air conditioning systems and can contribute to making the space colder. Warming your space to temperatures above the set point triggers the system to respond by cooling more.

Thus, space heaters and air conditioning work against each other, and together cause even more energy use and carbon emissions.

By controlling air conditioning temperatures better, we can achieve the combined benefits of using less carbon-intensive electricity; reducing our peak demand for electricity and the associated cost savings; reducing space heater usage during the summer; and improving occupant comfort.

³ These temperatures are within recommended ranges of the American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Standard 55.

⁴ Depending on the requirements of the individual space.

A. ADMINISTRATIVE/ACADEMIC BUILDINGS

OCCUPIED

During the winter heating season (mid-October to mid-May), temperatures in administrative and academic facilities will be set to achieve an air temperature of 68-71° F (20° C) during occupied hours. Occupied hours are defined as those hours during which the facility is scheduled for occupancy, whether for classes or administrative functions. Typically, occupied hours for those facilities without scheduled evening classes will be 7 a.m. until 6 p.m. while those facilities with scheduled classes, operations, or activities are usually occupied until 10 p.m.

During the summer cooling season (mid-May to mid-October), occupied spaces will be cooled to achieve an air temperature of 74–76° F (23–24° C) where air conditioning equipment currently exists.

UNOCCUPIED

During unoccupied hours (Monday–Friday after 6 p.m. in selected facilities, after 10 p.m. in others, and throughout the weekend), temperatures will be set at 50–55° during the winter heating season, depending on the requirements of the individual space⁵.

During the summer cooling season, unoccupied spaces will be set no higher than 80°, depending on the requirements of the individual space.

CAMPUS HEATING AND COOLING SYSTEM

Brandeis operates its central steam plant and cooling systems on a seasonal basis. Heating is not available once the central chillers are put in service for the cooling season, and cooling is not available after the central chillers are turned off for the season.*

The decision to start central heating and/or air conditioning equipment will be made by Facilities Services based upon long-term weather predictions during the fall and spring. Historically, switches happen during mid-May and mid-October.

Building temperatures may vary to a greater extent in the time period closely preceding and following this biannual switch between heating and cooling as the result of 1) unusually warm days once the chillers have been turned off, and 2) unusually cold days once the chillers have been turned on.

⁵ Due to heat retention of buildings, this low limit will not be reached for several hours, if at all, after setback. For example, a building setback at 6 p.m. will most likely still be very comfortable at 7 - 8 p.m.

* There is significant energy loss and wear on equipment when the University must turn the chillers back on after turning them off, and vice versa, for the season.

B. RESIDENCE HALLS

Residence halls, including common areas, are considered occupied at all times except during holiday/summer breaks, unless a residence hall is designated for summer occupancy. Exceptions may be requested for residential staff living on campus during breaks.

During the heating season, temperatures for steam and circulating hot water systems will be set to achieve an air temperature of 68-71° F (20-22° C). During the cooling season, residence halls with air conditioning served by centrally-provided chilled water (Village, Ridgewood, Ziv and Castle) will be cooled to achieve an air temperature of 74-76° F (23-24° C).

The campus steam distribution system requires a two- to three-week period to start up. As a result, there may be a few uncomfortable days when the outside temperature suddenly rises or falls.

During holiday breaks when residence halls will be unoccupied, heating will be lowered to 50-55 degrees, or cooling will be raised to 80 degrees, as appropriate for the season.

While unoccupied during breaks, residents of Foster Mods and Charles River Apartments are required to turn their heat to 60 degrees during winter, and to turn off their air conditioning when the buildings are unoccupied in summer.

MEDICAL CONDITIONS

If a resident has a medical condition that requires specific heating, cooling, air filtration, or dehumidification, they must contact the Department of Community Living (DCL) prior to housing selection.

TYPES OF HEATING SYSTEMS IN RESIDENCE HALLS

Three types of heating systems serve the residence halls: Steam heat from our central steam plant (East, Massell, North and Rosenthal); circulating hot water (Castle, Village, Ridgewood, Ziv and 567 South Street), and electric heat (Foster Mods and Charles River Apartments).

Each system allows individual adjustments controlled by a knob, lever or set of buttons. For steam heat and circulating hot water systems, the individual controls can incrementally decrease or augment the level of heat in a room, but since these heating systems are controlled centrally, individual control is limited.

For electric heat systems, the individual controls adjust to the level of heat desired. They are active all year.

C. HOLIDAYS AND BREAKS

Most buildings are set to unoccupied temperature levels during holidays and breaks. However, the activities of various areas on campus may require buildings to be set at occupied levels when the rest of campus is shut down. The following buildings are exempt from being set to unoccupied levels during breaks:

- Abelson-Bass-Yalem
- Bassine
- Edison-Lecks
- Foster Bio-Medical Research Center
- Graybiel Lab in Rabb
- Kosow-Wolfson-Rosensweig
- Landsman Nuclear Magnetic Resonance Facility
- Psychology Labs in Brown
- Rosenstiel
- Shapiro Science Center
- Volen
- Athletic Center during practice/event times
- Goldman-Schwartz & Epstein art studios (will be set for limited occupancy hours during breaks to allow for some work in studios)

Other buildings will be considered for occupied-level temperatures during holiday breaks upon special request to Facilities Services via an [online work order request](#). **Requests must be submitted at least 48 hours in advance.** Facilities Services reserves the right to reject special requests if expected occupancy rates over holiday periods is minimal or not guaranteed.

SYSTEM SHUT DOWNS

Occasionally, the central chiller systems may require a brief shutdown during cooling season for maintenance. In the event that a shutdown is necessary, the following areas are exempt and will not be impacted:

- Rose Art Museum (due to collections)
- Faculty Center (due to events)
- Science Center (due to lab and equipment cooling requirements)
- Goldfarb library (due to archives and computer labs)
- Slosberg (AC on during concerts in Recital Hall)
- Shapiro Campus Center (AC on during shows in theater)
- Spingold Theater (AC on during shows in any theater)
- Landsman Nuclear Magnetic Resonance Facility

2. MEASURES TO INCREASE THERMAL COMFORT DURING PERIODS OF SUSTAINED HEAT

The University expects supervisors to exercise flexibility in assisting employees in finding adequate working conditions during periods of extreme heat and Turn It Off days. During such periods:

- Temperature-appropriate attire is strongly encouraged. All staff, as well as faculty and students, are encouraged to wear light, well-ventilated, appropriate attire.
- Wherever possible, flexible work schedules should be encouraged, allowing employees to report to work 1–2 hours early and to leave earlier to avoid the maximum heat period during the middle and late afternoon. In addition, during intense heat and/or demanding physical exertion, supervisors will encourage their staff to take as many breaks as necessary to maintain personal health and safety. Individual staff members are also expected to exercise personal self-care by remaining hydrated, using good judgment and monitoring the effects of the heat and exertion, and notifying their supervisors of any concerns.
- Where it is not imperative that office staff remain at their desks at all times, supervisors should permit them to take their work and move to a "cool area" — a naturally cooled or air conditioned space either in the same building or in a proximate one.

3. SUPPLEMENTAL HEATING AND COOLING DEVICES

Space heaters pose serious fire and electrical hazards and are not energy efficient. They can trip electrical circuits in buildings, disabling power to building areas.

The use of space heaters at the University is strongly discouraged.

The University reserves the right to inspect and declare “unapproved” any space heater that creates a safety hazard or is inappropriate to a particular location, based on specific circumstances or legal requirements. If warranted, space heaters may be removed by Facilities Services and the owner must remove them from the University.

SPACE HEATER REQUIREMENTS

Design Requirements

1. All heaters must be Underwriters Listed (UL) or ETL Listed for their intended use.
2. Heaters must have a tip-over automatic-shutdown feature.
3. No open-coil space heaters are permitted in any University buildings.

Use Requirements

4. Heaters must be kept at least 3 feet (36 inches) from all combustible materials e.g., desks, trash cans, papers, boxes, fabric, plastics, office furniture, etc.
5. Heaters must be monitored when in operation.
6. Heaters must be plugged directly into a wall receptacle. Never plug a space heater into an extension cord.
7. Space heaters of any type are prohibited in laboratories.
8. Always turn off a heater and unplug it when you leave the office. Never leave an operating heater unattended.
9. Before use, ensure that the heater is clean and not covered with dust. The cord must be in good condition and not frayed.
10. Never run a power cord under a carpet or floor mat.
11. Never use a heater where flammable materials or vapors may be present.
12. Do not place a heater in or near wet areas or in high traffic areas such as exit ways.
13. Inspect space heaters at least annually and have them repaired, as needed, by a qualified electrician. Heaters that cannot be repaired must be discarded with the plug cut off to prevent use by others.
14. Do not place space heaters near room thermostats.

Supplemental air conditioning units are prohibited in all University spaces unless medically necessary. Portable air conditioning units will be confiscated if found.

All requests for exemptions to this policy in academic or office areas should be directed to Facilities Services via an [online work order request](#) or by calling x6-8500. Exceptions in residence halls should be directed to the Department of Community Living.

4. OCCUPANT AND SUPERVISOR RESPONSIBILITIES

Lighting

- **Individuals are expected to turn off lights upon exiting rooms and to turn off lights in unoccupied rooms and common areas, whether used by that individual or not.**
There is no place on campus where leaving lights on is more efficient than turning them off.
- The University maintains central control over lighting in only a select few buildings. The majority of lighting across campus is user-controlled.
- Building emergency and safety lighting will always remain on, pursuant to safety codes. Occupants do not have control over safety lighting.

Windows

- Windows should not be opened during the winter to cool spaces, nor in the summer to warm spaces. Windows and outside doors should not be propped open if a space is air conditioned.
- Occupants should ensure that windows, storm windows, shades and blinds are positioned for the season. Shades and blinds should be positioned to assist in providing thermal comfort.
- Windows should be closed when leaving spaces for multiple days, such as weekends and holidays.

LIGHTING

In commercial buildings, lighting can account for up to 30% of the electricity usage.

Because the University does not have direct control over most lighting systems on campus via "smart" lighting controls, the community must act together to tackle the frequent problem of lights left on in unoccupied spaces.

Individuals are expected to not only turn off lights upon exiting rooms, but to turn off lights in unoccupied rooms and common areas, whether used by that individual or not.

Occupants do not have control over safety lighting. That means when you turn off the lights in an unoccupied space, building emergency and safety lighting will always remain on.

Office and classroom equipment

- Individuals are expected to turn off office equipment (including monitors, task lights, projection equipment and other, where possible) when leaving their workspace for more than 20 minutes and at the end of the day.
- Occupants should enable power management features on computers, laser printers and copiers and power them down whenever possible, particularly on evenings and weekends.
- LTS provides information on computer power management settings and how to optimize energy management on your computer equipment. Please contact LTS if you have questions or need assistance, [online](#) or at x6-7777.

Thermostats

- Occupants should not block thermostats with wall furniture or equipment.
- Individuals are expected to move any heat-generating equipment away from thermostats (lamps, computers, monitors, coffee makers, etc.). This equipment can cause false readings at the thermostat, resulting in inappropriate temperatures in building spaces.

Seasonally appropriate clothing

- Building occupants are responsible for their own comfort, within reason. Occupants are expected to contribute to their own comfort by wearing appropriate clothing for their workplace.

5. TURN IT OFF DAYS

During the hottest days of the year, the University will continue to implement [Turn It Off](#) days, as appropriate, to manage electrical demand and associated costs and to limit our use of the most carbon-intensive electricity of the year.

Reducing electricity use during these peak times will result in environmental gains as well as financial savings. In New England, electricity demand during heat waves necessitates the operation of old, inefficient power plants, leading to an increase in harmful air pollution. And since the University's year-round electricity rates are partially based on our demand during summer's hottest days, if we reduce our usage during those days we will lower the electricity rates we pay all year long.

6. ROOM RESERVATIONS FOR MEETINGS, CONFERENCES AND EVENTS

The University's heating and cooling system is automatically connected to the University's room reservation system (R25). When spaces are reserved for events, those rooms are automatically heated or cooled prior to the event to prepare for the event, and are subsequently controlled for the duration of the event as reserved in R25.

All individuals with access to R25 for room reservations may not reserve space for periods when the space will not be in use. For example, spaces may not be reserved "just in case." Doing so causes the HVAC system to heat or cool the space accordingly, and the resulting energy loss is significant. **This policy applies to summer program activities, along with others.**

Conference and Events staff will set lighting at minimal levels, preferably off, after room setup and before the start of an event. Individuals and groups that reserve spaces are expected to turn lights on fully when they begin to occupy the space. **Full lighting may not be left on in unoccupied spaces after room setup, unless absolutely necessary.**

7. ENERGY EFFICIENT EQUIPMENT

In all areas for which ENERGY STAR ratings exist, the products that Brandeis University purchases will be ENERGY STAR certified or exceed the performance requirements for ENERGY STAR certification. In areas for which guidelines are not available, Brandeis will seek the most energy-efficient products, except where alternatives are not available.

Procurement will take into consideration the life-cycle cost of equipment's energy use in purchasing decisions.

8. VEHICLE IDLING

Idling vehicles pollute the air and present several health and environmental hazards. With thousands of residents on campus, it is central to the mission of the University to keep our campus population safe and healthy. Pollution from idling vehicles poses a direct risk to our population.

No vehicle on campus vehicles shall sit idling for longer than 5 minutes except in the case of snow removal, emergency operations, or the exemptions indicated below. This applies to faculty-, staff-, student-, contractor-, and University-owned vehicles and to shuttles. This is an extension of the policy the University first implemented in 2008 for all Facilities Services vehicles on campus.

Massachusetts General Law (MGL Chapter 90, Section 16A) and the Massachusetts Department of Environmental Protection (DEP) idling reduction regulation (310 CMR 7.11(1)(b)) both prohibit unnecessary vehicle idling by stating that the engine must be shut down if the vehicle will be stopped for more than five minutes.

Exemptions include: 1) the vehicle is being serviced and the idling is required to repair the vehicle; or 2) the vehicle is making deliveries and needs to keep its engine running (to power refrigerators, for example); and, 3) the vehicle's accessory equipment needs to be powered, such as a fork lift or a truck's rear dump bed, or a wheelchair lift in a bus or van. To provide additional protections for children, MGL Chapter 90, Section 16B further restricts unnecessary idling in school zones.

IMPACTS OF VEHICLE IDLING

Gasoline and diesel vehicle tailpipes produce carbon monoxide, carbon dioxide, volatile organic compounds (VOCs) and oxides of nitrogen (NOx). Carbon monoxide causes respiratory distress and in high concentrations can be lethal; carbon dioxide is a primary contributor to global warming; and VOCs and NOx form ozone and ground-level smog and impair lung function.

In addition, diesel exhaust contains fine particulate matter, which the U.S. Environmental Protection Agency has designated as a likely carcinogen. The elderly, chronically ill and children are all particularly vulnerable to these health effects, because their lung function is respectively decreased, impaired or still in development.

APPENDIX A: Temperature policy review

School	<i>Winter</i>		<i>Summer</i>	
	Occupied	Unoccupied	Occupied	Unoccupied
<i>Range, other schools</i>	68-74°	45°-71°	69°-78°	69°-85°
Harvard University	68°-71°	68°-71°	74°-76°	74°-76°
Tufts University	68°	55°	78°	No AC
Bentley University	68-74°	58°	68-74°	83°
Brown University	70°	70°	76°	76°
Dartmouth College	69°	45° - 55°	69°-75°	69°-75°
Columbia University	68°	55°	76°	NA
Rochester Institute of Technology	68°	55°	78°	85°
Wesleyan University	68°	65°	75°	77°
Western Michigan University	69°	60°	74°	85°
Hudson Valley Community College	68°	55°	76°	80°

APPENDIX B: 1996-1997 Brandeis University Heating Policy



BRANDEIS UNIVERSITY

Waltham, MA 02254-9110

Office of Administrative Affairs

RECEIVED

SEP 20 1996

FACILITIES MGMT.

September 23, 1996

MEMORANDUM

To: All Heads of Academic and Administrative Departments
From: Shelley M. Kaplan, Vice President for Administration
Subject: Air-Conditioning and Heating Conversion Policy

The Department of Facilities Management will begin to convert from the air conditioning systems to heating throughout the campus. As you may know from past years, because we have 100 buildings the conversion from air conditioning to heating requires as much as two to three weeks allowing time to shut down the chilled water systems which provide cooling and energize the central steam distribution system. Once conversion has begun we will not be able to return to air conditioning in any timely manner.

During conversion the New England weather may be cooler or warmer than is desired. We therefore request your patience and understanding if air conditioning is unavailable during a warm day or heat is unavailable during a cool day. The conversion process will be completed as soon as possible for each building with the residence halls taking priority.

The University Heating Policy for 1996-97 which follows, remains unchanged. On the attached page is a list of all buildings on campus indicating which of the following classification/guidelines apply to that building.

I. RESIDENCE HALLS

Three types of heating systems serve the residence halls: **Steam Heat** (East, Massel, North and Rosenthal); **Circulating Hot Water** (Catle, Ridgewood, Ziv and 567 South Street) and **Electric Heat** (Foster (mods) and Charles River (Grad) -- Charles River residents pay their own electric bills).

Each system allows individual adjustments controlled by a knob, lever or set of buttons. - For **Steam Heat and Circulating Hot Water Systems**, the individual controls can incrementally decrease or augment the level of heat in a room, but since these heating systems are controlled centrally, individual control is limited. Additionally, the steam distribution system requires a two to three week period to energize. As a result, there may be a few uncomfortable days when the outside temperature suddenly rises or falls. For **Electric Heat** systems, the individual controls adjust to the level of heat desired. They are active all year.

Temperatures for Steam and Circulating Hot Water systems range from 64 to 70 degrees. The temperature in a room should never dip below 64 degrees with windows closed and the individual control fully open. Alternately, room temperature should never exceed 80 degrees during heating season (during Winter Intersession the heat is lowered in the residence halls).

II. ADMINISTRATIVE/ACADEMIC FACILITIES

Average temperatures in these facilities will be maintained at 68 degrees (66-70 degree range) during OCCUPIED hours. Occupied hours are defined as those hours during which the facility is scheduled for occupancy whether for classes or administrative functions. Typically, occupied hours for those facilities without scheduled evening classes will be 8 a.m. until 5 p.m. while those facilities with scheduled classes, operations, or activities are usually occupied until 10 p.m.

Current setback policy for Administrative/Academic facilities calls for a low limit of 55 degrees during unoccupied periods (Monday - Friday after 5 p.m. in select facilities, after 10 p.m. in others, and throughout the weekend.) As in the case of the dorms, this low limit will not be reached for several hours, if at all, due to the heat retention of the building, so that a building setback at 5 p.m. will most likely still be very comfortable at 7 - 8 p.m. Activities properly scheduled during non-occupied hour can be accommodated as long as prior notification is provided.

III. OTHER FACILITIES

Certain facilities, areas within facilities and/or specialized pieces of equipment will be maintained at constant temperatures twenty-four hours per day seven days per week due to specific environmental or statutory requirements.

Facilities with computerized energy management systems will be programmed as required, to maintain comfort range (while occupied), environmental requirements, and conservation optimization. If there are requests to make special provisions in occupancy schedules, or if there is a problem with the temperature in a given building or area, call the Department of Facilities Management at extension 4385.

BRANDEIS UNIVERSITY

1996-97
Building Heating Schedule

I RESIDENCE HALLS

Castle & Schwartz Hall (5)
Charles River Apts (1)
East Quad
Foster Apts (1)
Massell Quad
North Quad
Ridgewood Quad
Rosenthal
Ziv Quad
567 South Street

II ACADEMIC/ ADMINISTRATION

Berlin Chapel (7)
Bernstein Marcus (5)
Bethlehem Chapel (7)
Brown
Cottages 15, 20 & 28
Ford-Sydeman
Gerstenzang (5)
Golding
Golding Outpatient
Goldman-Schwartz (5)
Goldsmith Math (5)
Gosman Sports Center (5)
Gryzmish (5)
Harlan Chapel (7)
Hassenfeld Conference Center
Heller School
Irving Enclave (5)
Kutz Hall
Lemberg
Libraries (3 & 5)
Linsey Center
Lown Center
Mailman House
Olin-Sang Center
Pollack Art Center (7)
Pearlman Hall (5)
Rabb Graduate Center
Sachar International Center(5)
Schwartz Hall
Shapiro Admissions Center (5)
Shiffman Center
Sherman Dining Hall
Spingold Theater (4 & 5)
Usdan Student Center (5)
Wien Faculty Center

III OTHER FACILITIES

Bass Physics (5)
Bassine Biology (5)
Edison-Lecks (5)
Feldberg Center
Foster Animal Center (5)
Friedland Science (5)
Kalman Science
Kosow Biochemistry
Main Gate
Rose Art
Rosenstiel Center (5)
Slosberg Music (5)
Volen Center (5)

- (1) Heat is on individual controls - students are encouraged to turn thermostats down at night
- (2) Classrooms off when not in use
- (3) Except rare books area which is under Section III
- (4) Systems on for weekends - main theater off except when in use
- (5) Controlled by computerized energy management system
- (6) Systems on for weekends when in use
- (7) Programable setback thermostats