The late 1970's were a time of energy crises, leading to the development of new energy sources in the United States. Solar energy was a major research interest. The University of Tennessee, taking its own interest in the energy crunch, built its first of five TECH (Tennessee Energy Conservation in Housing) in 1976.

Much research took place prior to the building of these houses. Data was provided by the National Solar Data Program. Emphasis on the TECH Project was placed on water heaters, insulation, heat pumps, and cooling systems.

The collection is split up into four parts: National data, TVA data, UT data, and misc data, which includes slides and photos of the TECH Project.
BOX 1

National Data

15: National Solar Data Program Rural Housing Research Unit: Clemson, South Carolina
16: Portland, Oregon G.E. Corp. Solar Heating Project
17: Comparative Reports From National Solar Data Program (NSDP)
18: Availability of Solar Energy Projects
19: Data Comparison of Solar Projects in the United States
22: Pamphlets on Insulation
Box 2

2: American Society of Mechanical Engineers: Solar Energy Division
5: ORNL Crawl Space Heat Pump, 1981
6: Ground Coupled Heat Pump: Papers and Reports
8: Solar Energy Research Institute III and VI
9: Heliothermics: Heat Collector
10: Solar Assisted Heat Pump: Seattle

TVA Data
11: TVA Solar Strategy Project, 1979
13: TVA Active Space Heating Analysis
14: TVA Solar Heating Analysis
15: Solar Water Heating Assessment for TVA Region
16: Solar Heat Pump Reports: TVA Project #2, 1979
18: Performance Report: TVA Project #1
19: Economic Analysis: TVA Project #1
20: Temperature Data of TVA: Spring Hill, TN, 1983

UT Data
21: Overview of TECH Program
22: Construction of TECH House
23: TECH Program Donations
24: Solar House File on Robert Baugh, Director of TECH Program

Box 3

Folder 1: Expenses for TECH Project #1
2: Expenses for TECH Project #2
3: TECH Site Work: Operation and Maintenance
4: Control House for TECH Project
6: UTK Solar Passive House III: Layout and Data
7: Passive Solar Modular House: TECH House II and V
8: Solar Air System Construction
9: Air Solar System DAS, 1979 TECH Facility
10: Tests on Solar House I, 1977
12: Ditch Witch for TECH House V
14: Performance of TECH House Solar Heat Pump
15: Steady State Cooling of TECH House I and V
16: Passive House Weekly Data Summary, 1983
17: TECH House Meter Readings, 1984
18: Correspondence: TECH Project
19: Ground Coupled Heat Pump Research

Box 4

Folder 1: Solar Water Heater/Pump Proposal
3: Heat Pump System Evaluations
4: Solar House Heat Pump: Air
5: Solar House Heat Pump: Water, DAS (Data Acquisition System)
6: Ground Coupled Heat Pump Weekly Data Summary, 1983
7: Ground Coupled Heat Pump Technical Data, 1983
9: Ground Coiled Heat Pump Interim Report #1
10: Ground Coiled Heat Pump Interim Report #2
11: Ground Coiled Heat Pump Interim Report #3
12: Ground Coiled Heat Pump Interim Report #4
13: Ground Coiled Heat Pump Interim Report #5
14: Ground Coiled Heat Pump Interim Report #6
16: Skylight Project, 1982
17: Bradley GTE Automotive Project
18: Solar Water Heater Project for Andy Holt Apartments
19: Specifications: Andy Holt Water Heater
20: Dryer for Large Hay Stacks Project Using Solar Engineering
21: Hay Stack Dryer Project Continued

Box 5

2: Energy Efficiency in Residential Bldg. with Combined Zonal Radiant Heating Research Proposal
3: Oliver Springs Thermal Project-- Administration
4: Oliver Springs Thermal Project-- Administration
5: Oliver Springs Thermal Project-- TES Reports
6: Oliver Springs Thermal Project-- DAS
7: Rough Draft of Interim Reports/Final Reports of Oliver Springs Project
8: ACES (Annual Cycle Energy System) House Construction Correspondence, 1975-1977
9: ACES System
11: SAHP and TES Original Figures for Final Report
12: Windmill Project (UT)
13: UT Cooling Degree Days
14: Completed Data: 1985 Cooling System
15: Weather Data Analysis
16: UT Energy Analysis Report
17: Residential Insulation Retrofit Evaluation
18: Alternation Sources of Energy
19: UT Steam
20: UT Industrial Process Heat, 1979
21: Various Expenditures

Box 6

Folder 1: TN Energy Authority Energy Audits
2: UT Center for Industrial Services Energy Audit
3: Campus Energy Audits: Level II
4: Campus Energy Audits: Level III
5: Solar Heating System: Colorado State University
6: ETSU SUN (Solar Utilization Now) Seminar, Knoxville, 1977
7: Heat Pump Assisted Solar Heated Residence: University Wisconsin Madison
8: F Charts from University Wisconsin Madison
9: Misc: Wastewater Treatment, Walden Creek
10: Misc: Data on Coupled Heat Pump
11: Misc: International Systems
12: Misc: Multi Year Research Plans-- Solar Energy Program
13: Misc: Masonry Bldg. Thermal Performance
14: Misc: Fern Engine Solar Space Heating System
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15: Misc: Pamphlets on Solar Energy
16: Misc: Energy Savings through Setbacks
17: Misc: Canadian Weather Data
18: Misc: Special Projects

Box 7

Misc Slides and Photos of TECH Project