Join us for a remarkable instructive experience as we learn about the current transformation that is occurring in the world’s electrical energy system and the future of renewable energy. We will visit Northern Italy, where we will tour a waste incineration plant that generates electricity, a solar PV cell fabrication facility, and other companies focused on energy production and storage. We will see up close the glacial retreat that has occurred due to climate change. We will also experience remarkable Italian cultural sites in the north of the country. In Spain, we will visit two large scale concentrating solar plants that generate electrical power and we will spend time in the culturally rich city of Seville. In Denmark where more than 50% of the country’s electrical demand is generated from wind energy we will see wind turbine farms, climb to the nacelle of a wind turbine, and we will tour turbine fabrication plants, including where the largest wind turbine blades in the world are designed and prototyped. We will also visit either Sweden or Iceland for additional energy site visits, including a tour of either a nuclear power plant or the largest geothermal power plant in the world. In each country, we will hear from local experts highlighting how renewable energy fits into the country’s energy portfolio. We will also be exposed to the culturally rich heritage and unique geography of each country, visiting sites of interest and sampling traditional local cuisine. A seminar series 2nd block of Winter Semester will expose students to world energy reserves, environmental considerations related to energy production and use, the importance of government energy policy, and total economic and thermodynamic analysis of energy-producing methods. Prior to departing for Europe we will also visit several local energy-related sites, including coal, hydroelectric, and natural gas powered plants. Over the course of the program we will visit 20-22 different energy related sites. The course will provide three credits of engineering technical elective toward graduation. The course is open to all majors, but preference will be given to engineering students who have taken an introductory Thermodynamics course. Students can take this class in the winter semester 2024 if they haven’t already done so.

DATES
Spring Term 2024. On-campus instruction will take place one afternoon/evening per week during 2nd block of Winter Semester, and all local site visits and international travel will take place for 21-22 days between April 30 and May 21 (3-4 days in Utah and approximately 18-19 days in Europe).
HOUSING
We will visit Italy, Spain, Denmark, and either Iceland or Sweden, focusing in each country on a different aspect of renewable energy. We will stay in hotels along the way, traveling from the hotels to energy-related sites and cultural experiences.

COURSES
Students will register in the following course during spring term 2024:
ME En 423 —Global Perspectives on Energy and the Environment (3 credit hours)
Students will also register for a 1 credit hour seminar course the second block of winter semester.

COST
$6,000–6,400 ($1,400 scholarship will be given by the Weidman Center for Global Leadership to student participants majoring in a program within the Ira A. Fulton College of Engineering).

Includes all course materials for the seminar 2nd block Winter Semester, Latter-day Saint undergraduate tuition for 3 credit hours spring term, airfare from SLC airport to/from Europe, air travel between the European destinations, in-country transportation, lodging, breakfast in all hotels, a cultural dinner in each country, and international health insurance coverage.

Does not include personal expenses, other meals.

TRAVEL
Flights which are covered by the program cost will be arranged by the program directors through a BYU Travel agent. Students may not purchase their own flights. BYU Travel | 280 HRCB | (801) 422-6293 | travel@byu.edu

PREPARATION
Prerequisites : ME 321 —Thermodynamics or equivalent with instructor approval
Students must meet all country- and program-specific COVID and health requirements for travel.

FUNDING SOURCES
Regular BYU tuition scholarships, Pell Grants, and Federal Insured Student Loans may be applied to Study Abroad programs, provided the university requirements of the financial assistance are met. Students who submit the financial aid section of the ISP application, and who have a current FAFSA form on file at the Financial Aid Office (A-41 ASB), will be considered for a Study Abroad scholarship. Academic departments and colleges may assist with scholarships and grants. Private grants and scholarships outside of BYU may also assist (see kennedy.byu.edu/isp/scholarships). Students majoring in Fulton College of Engineering will receive $1400 in support from the Weidman Center.

APPLICATION PROCESS
Complete the online application at kennedy.byu.edu/isp-apply.
A non-refundable $35 application fee is required. Applicants will be interviewed once the application is complete and will be notified via e-mail of their acceptance into the program. The first payment is due upon acceptance.
Priority Deadline: 1 November 2023
Application Deadline: 1 December 2023

FACULTY
Dan Maynes - maynes@byu.edu, (801) 422-3843
Brent Webb - webb@byu.edu, (801) 422-6543

SCHEDULE AND TIME COMMITMENT
The course will meet for a seminar on campus one afternoon/evening per week 2nd block of Winter Semester, and will make local energy site visits for three to four days beginning April 29 2024. We will then depart for Europe about May 3rd and will return from Europe about May 21st. Departure and return dates are somewhat flexible based on coordination requirements with energy sites that we will visit. All course assignments will be completed and submitted by the end of May 2024.

INTERESTED STUDENTS SHOULD CONTACT
International Study Programs
101 HRCB | (801) 422-3686 | isp@byu.edu | kennedy.byu.edu/isp

PROGRAM ADJUSTMENTS
International Study Programs (ISP) reserves the right to cancel this program, revise its offerings, or make any adjustments to the preliminary cost. If it becomes necessary for ISP to cancel a program, all program payments made to BYU ISP will be refunded to the student's BYU financial account. ISP is the only office authorized to cancel any of its programs.