

# First Prize Winner of the First Annual Center for German Studies Essay Competition, 2008/2009

## Lila Jividen, “The German Vorsorgeprinzip: Preparing Today to Ensure a Brighter Tomorrow”

Gayl Jones once said that “traditions can never be separated from people, from human implications. When we talk about tradition, it is our connections as human beings we are talking about.” The implication that Jones makes regarding traditions as a common thread intertwining people of similar backgrounds can be exemplified by the German tradition of the *Vorsorgeprinzip*. This precautionary principle embedded in the German mentality has guided and continues to guide the thoughts and actions of the German people, rendering Germany a pioneer in environmental protection initiatives, an innovator in the field of technology, and a leader in the business world. In comparison to other cultures worldwide, Germans continue discovering new alternatives, and plan for tomorrow.

The German Reichstag, originally constructed in the 19<sup>th</sup> century, presently obtains the majority of its power from renewable energy. Germany’s parliament buildings along the banks of the River Spree in central Berlin have been cleverly designed to capture as much natural light and air streams as possible. In the basement of each parliament building, biofuel generators supply heat and electricity. The German Environmental Ministry calculated that today more than 14% of the country’s consumption of electricity comes from renewable energy sources. This percentage is more than double the amount of renewable energy usage in Germany in the year 2000. Such advancements in environmental initiatives demonstrate Germany’s insight into and concern for the future of our fragile world. At the forefront of environmental protection, Germany reduced total greenhouse gas emissions by 18% between 1990 and 2005 while, during the same time frame, the United States increased total emissions by 16%. Before the Kyoto Protocol, calling industrial nations to reduce their carbon dioxide emissions to levels that are 5% below recorded emissions for 1990, was even finalized, Germany had already met the target level of reduction. Ingrained in the German culture is a certain preventative tradition that drives the German way of life.

Germany's impressive performance as a director on the international stage of environmental protection has not only focused on innovation but also on implementation. German laws and regulations encourage waste reduction and recycling, for producers themselves are responsible for the disposal of the packaging they create. An eco-tax on fuel discourages the use of petroleum, and government subsidies stimulate the installation of solar panels on the rooftops of people's homes. The law further subsidizes citizens who create their own energy from renewable sources through the Renewable Energy Sources Law, the *Erneubare-Energien Gesetz* (EEG). This law, also known as the "feed-in law," is the focus of the nation's climate change program and was introduced by the federal "Red-Green" government, a coalition of Greens and Social Democrats. Today all of Germany's major political parties support the EEG. As exemplified by the aforementioned laws and regulations, the German government has taken numerous measures to implement environmental protection and conservation policies. As noted by Miranda Schreurs, the director of the Environmental Policy Research Center at the Free University of Berlin, the German "people turn off the lights. People are much more conscious of what they throw away and where they throw it away."

Today, environmentalism is deeply rooted in German politics. Chancellor Angela Merkel has become a world leader in promoting policies on climate change and encouraging other nations to aid in safeguarding the future of our planet through preventative strategies today, before it is too late to act tomorrow. Although in the 1980s the environmental movement began to gain momentum on the international scene, some specific German environmental concerns helped shed light on the gravity of this issue. For example, Bavaria's conservatives became preoccupied with the state of their land after acid rain destroyed entire forests in Germany. Perhaps the most galvanizing international environmental issue is nuclear power. Since Germans were on the front lines of the Cold War, they were extremely conscious of the possible dangers associated with nuclear energy. The nuclear disaster at Chernobyl in the Ukraine on April 26, 1986, which still today resounds in the memory of many, spurred Helmut Kohl to create a federal ministry to oversee nuclear safety and the environment and to introduce Germany's first feed-in law in 1991. Exactly sixteen years after the incident at Chernobyl, the German government and German energy suppliers enacted the *Atomkonsens*, a nuclear agreement to gradually phase out nuclear power as a source of energy in Germany. This Atomic Energy Act is a prime example of the German tradition of the *Vorsorgeprinzip*, for the German government and businesses have combined efforts to stop any dangers associated with nuclear energy, preventing catastrophes before they occur. Other nations should follow in Germany's footsteps before another international disaster strikes.

Germans have also applied their tradition of precaution to the field of technology. In 2008, the Bosch team comprised of Dr. Jiri Marek, Dr. Michael Offenburg, and Dr. Frank Melzer created intricate sensor components using surface micro-machining procedures. These sensor devices allow a car to detect if it is skidding and stabilize itself, permit a laptop to protect the hard drive from the impact of a fall, and enable rescuers to locate an automobile driver in distress through cell phone signals. This team of German scientists has developed vital processes for surface micro-machining, thus producing the ideal conditions for the manufacturing of tiny, powerful, cost-effective and energy-efficient sensors. Additionally, these German innovators have expanded this technology to a stage of mass production and have generated a market for micro-mechanical sensors.

Deriving from modern electronic semiconductor technology, micro-machining creates movable components that perform mechanical functions. Previously, the bulk production of micro-mechanical sensors has been used only in manufacturing and for pieces in larger machines such as cars. These sensors are too huge and complex and utilize an enormous amount of power. The new, small, micro-mechanical sensors function like electronic sensory organs. The Bosch company's invention can measure the exact acceleration of a heartbeat, thereby enabling doctors to carefully monitor the physical activity of patients with cardiac problems. The sensors permit computers to rapidly store data in the event of a fall and activate an airbag in the event of a crash. The German technological advancements, such as the micro-mechanical sensor, are based on the tradition of the precautionary principle and increase safety measures worldwide.

In addition to effectuating change through environmental policies and technological innovations, Germany's tradition of taking preventative measures has also carried over into the business sector. On average, German workers enjoy greater job security than do employees in the United States. American workers are often "at will employees," meaning they can be fired without notice at any time and without any reason. "At will employment" also allows employees to quit without providing prior notification or explanation. German workers, however, have considerable legal protection against layoffs. For example, in the German business world there exists the right of advance notice of dismissal and the right to compensation in the event of a mass layoff. Furthermore, Germany's employment protection laws include labor market policies, such as the availability of partial unemployment insurance benefits for part-time workers. This insurance benefit, along with an extensive worker training program, aids in solidifying employment security.

Numerous benefits arise from greater job security policies that mitigate layoffs. Unlike German corporations, companies in the United States incur substantial costs associated with hiring and training new workers when conditions improve following temporary downturns in demand. German policies, however, have been quite successful at granting workers stable employment without inhibiting labor adjustment and without imposing burdensome costs on employers. In Germany, a large portion of laid-off workers receive legally supported severance payments. Additionally, the German government helps companies pay for the cost of apprenticeship training, if the company does not already share the cost through an employer's association. Thus, although German firing laws may render layoffs for companies more costly, government policies, such as unemployment insurance and subsidized early retirement plans, enable German companies to offer strong job security for less of a cost. German laws place job security in a context in which employers and employees both benefit from policies such as partial unemployment insurance benefits, severance packages and government subsidized worker training programs. The German tradition of taking precautionary measures in order to secure employment for workers exemplifies how the *Vorsorgeprinzip* has become embedded in German culture and society.

Carbon dioxide emissions, heart attacks and employment layoffs know no international borders. The environmental, technological and economic problems faced by Germans affect all nations to some extent or another. Therefore, the German tradition of preparing today for possible problems emerging tomorrow has global relevance. All nations worldwide would benefit by emulating the German tradition of the *Vorsorgeprinzip*.