

Walking the Walk: The Sacred Art of Energy Conservation
Sermon for Kol Nidre 5767
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"When God created the first human beings, God showed them around the Garden of Eden and said to them, 'Look at my handiwork, my creation, how beautiful and balanced it is. Be careful not to ruin or destroy my world, for if you do, there will be no one to repair it after you.'"

The ancient rabbis who wrote this Midrash teach us two simple but critical lessons about our natural world. One: that our world is designed to be inherently *sustainable*. In today's lingo, this means a world that can provide for the needs of its current population without damaging the ability of future generations to provide for themselves. The second lesson teaches that the sustainability of God's creation is radically dependent upon human behavior. To put it simply, the future of our world is up to us.

This Midrash is, more than anything, a cautionary tale - and I would argue it resonates more powerfully today than at any other time in human history. Indeed, the vision of our world as a grand and sustainable habitat, and humanity as Creation's steward, is in grave danger of becoming obsolete. Bill McKibben, in his landmark book, "The End of Nature," puts it well: "We're used to thinking of the Earth as changing with infinite slowness, but in fact it is now speeding up, changing in rapid, dangerous and profound ways as a result of our alterations...Our sense of scale is awry - we're used to thinking of people as small and the world as large, but in our lifetimes, the opposite has become the truth."

Though the rabbinic writers of our Midrash could not have imagined the post-modern predicaments of today's world, they seem to have anticipated it perfectly. The fear they articulate has largely been realized: since the industrial revolution, technological advances have improved the lives of countless generations. But in so doing, we've progressively exploited limited resources, and in particular, have developed an overwhelming dependence upon fossil fuels – primarily oil, gas and coal – for energy. This is a process that may likely have catastrophic consequences for future generations.

Tonight I'd like to talk a little bit about this issue, for it is one that has critical implications for us all. I'd like to explore the consequences of harnessing increasing amounts of energy in increasingly un-sustainable ways. And, as this is onset of Yom Kippur, the season of our accounting, I'd like to address *our* collective complicity in this process – as citizens of the industrialized world and as Americans in particular.

To be sure, humanity's relationship with energy has always been complicated. One could make the compelling case that human history has been marked by the ongoing quest to discover ever-larger quantities of energy in ever more effective ways. Today, energy impacts on just about every aspect of our lives and our world. It affects us in a myriad of ways seen and unseen. On a greater level, it is the linchpin upon which our entire future depends. Our need for energy affects our economy, our foreign policy, the diplomatic alliances we create, the wars we wage.

However, even though energy represents such a staple of our very existence, it could also be argued that we Americans are the most energy-illiterate people on the planet. Most of us are profoundly ignorant of what energy even is. If we pay it any mind at all, it is in the guise of rising gas prices and heating bills. Few of us understand – or care to understand – the process that occurs when we flick a light switch or turn on the ignition. We know little to nothing about how much energy we consume in the course of a day, let alone the larger consequences of our consumption.

By contrast, those who have visited the developing world will attest that citizens of poorer nations are profoundly in touch with their energy consumption. The ready availability of gasoline and electricity can never be taken for granted there – every stick of wood, every gallon of cooking fuel is a precious resource to be respected. But as countries grow more affluent, energy seems to turn into an entitlement. What it is, where it comes from, how much we consume, how much we might possibly conserve – these things are notably absent from our radar screens. Energy is expected to be there for us when we need it. It is for us, largely an invisible commodity.

It is no surprise to discover that Americans are also the most extravagant consumers of energy in the history of the world. America, a country with less than 5% of the world's population currently uses 25% of the world's energy. Of course it is true that since our economy is larger than any other country, it requires more energy to sustain it. But it is also true that our lifestyle is twice as energy-intensive as that of other affluent countries – and about ten times the average globally.

However, before anyone accuses me of America-bashing, I will hasten to add that rapidly industrializing nations such as China and India will be also requiring increasing supplies of energy as they seek to expand over the next few decades. Here's an interesting statistic: In 1985, only 7% of all Chinese had refrigerators – today that figure is more than 75%. Overall, residential electric power in China more than quadrupled since 1984. That country is also becoming transformed into a car culture with incredible speed. In 2003, General Motors predicted that China would account for almost a fifth of all new car sales between 2002 and 2012 – almost twice as many as the United States.

Even for those of us who are not conspiracy theorists, the consequences of this unbridled energy consumption are horrifying to contemplate. Sooner or later, experts tell us, our energy bubble is going to burst, a prospect which carries grave implications for our world. Now, the issue of precisely when the world's oil reserves will peak is an area of very hot debate, and one that I won't weigh in on now. But I do think it is safe to say this: it is not a question of *if*, but *when*. If it does not occur in our generation, it surely will in our grandchildren's or great-grandchildren's. And virtually all experts agree that if we continue along our current energy path, once the peak does occur it will be too late to do anything about it. And the impact upon our world economy, political stability and environmental well-being could be dire indeed.

The United States finds itself in a paradoxical place in all of this. As the world's foremost consumer of energy, we are a major part of the problem. But because of our unique

position of power in the world, we *must* also be part of the solution. And, yes, there are solutions. Despite the severity of our current energy addiction, there are concrete measures we can take to slow down and, in some cases, even reverse this process. We can devote more time and money toward developing alternative energy sources such as solar power, hydropower, wind-power, hydrogen cell and biomass energy. By the same token, we can do much more to conserve current sources of energy – and to consume it in a more efficient manner.

To do this we will need nothing short of a American cultural paradigm shift – to understand that these kinds of sacrifices are not a sign of weakness, but rather of moral authority. In this regard, we may well find guidance from Jewish tradition. Indeed, Jewish tradition has always considered energy conservation to be a central spiritual value. The Talmudic concept of *Bal Tashchit* (a term which literally means “do not destroy”) explicitly forbids us from wasting the earth’s natural resources, and specifically fuel. According to the Talmud, *Bal Tashchit* forbids the covering of an oil lamp, presumably because it speeds up fuel consumption and increases waste. The rabbis of the Talmud, with their discussion of lamp wicks and fruit trees could never dreamed of the global dimensions of our current energy economy. But it could well be stated that the rabbinic conception of *Bal Tashchit* is even more critical today. In fact, energy conservation might well be considered the spiritual imperative of our time.

Energy efficiency also has very practical economic implications for our society. In truth, we waste an enormous amount of energy every day through the seemingly most mundane

of acts. For instance, only 10% of the energy used by a regular, incandescent light bulb is actually turned into light. Less than a quarter of the energy used in a conventional stove actually reaches our food and barely 15% of the energy in a gallon of gasoline ever reaches the wheels of our cars. While this squandered energy represents shameful waste, it also presents us with potential opportunities. Some energy efficiency experts suggest that by making simple improvements to cars and buildings, America could save the energy equivalent of twelve million barrels of oil a day.

There is nothing token about the concept of energy efficiency. Though we often feel powerless to effect the course of our energy future, there is a great deal that we can do. If we are ready as Jews to reclaim *Bal Tashchit* as a spiritual value, if we are ready as Americans to assert that conservation is essential to the collective future of our nation and our world, we could indeed make a fundamental change in the pace of our energy consumption.

I want all JRC members to know that your congregation is currently making this commitment in a powerful way. As many of you are aware, during the course of JRC's building project, our board made the commitment to constructing our facility as a "Green Building." Specifically, this means we are participating in a process known as LEED certification – a system designed by the US Green Building Council. LEED stands for "Leadership in Energy and Environmental Design" and it is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. It promotes a whole-building approach to sustainability by recognizing

performance in five key areas of human and environmental health: sustainable site development, water savings, materials selection, indoor environmental quality, and yes, energy efficiency.

LEED certification is based on a grading system, with points awarded for commitment to each of these five key areas. Buildings that garner 52 to 69 points achieve the highest level, or Platinum status. The next level, Gold, is awarded to buildings that achieve 39 to 51 points. I am so pleased and proud to report that JRC is currently on track to achieve 44 points, which would put us firmly in Gold status – a designation which would make us the only such synagogue or Jewish institution in the world.

The LEED checklist for our new building is long and complex, but I would like to highlight a few of these features, just so you will understand the truly monumental nature of this undertaking. Overall, the overall energy savings of our new building will be a 34% savings over the conventional standard – which equals \$20,000.00 of annual operating expenses over the old Com Ed. standard.

Our building will achieve this through a variety of means. Among the many energy efficient features of our new home will be our white, reflective roof. Most homes and buildings in America, in fact, are built with dark roofs that absorb heat, forcing air conditioners to work up to 20% longer and use a fifth more power. JRC's reflective roof will help our air conditioning system to work more efficiently, especially during peak usage hours. Our new building will also be built with a tight, energy conserving shell,

with thicker walls and more insulation that retains more cool air in the summer and more heat in the winter. Likewise, our windows will be made of special glass that lets in more natural light and less heat from the outside.

Our HVAC system will be computerized and divided into zones, designed to only cool or heat those areas that are actually in use. JRC's sanctuary, which will have a high ceiling, will be calibrated to heat or cool from the floor to about seven feet up, so as not to waste energy in the upper levels of the room. And because our building will be built tightly, our ventilation system will use motion and CO2 sensors to let in the requisite amount of oxygen for ventilation at any given time.

These kinds of features are more than just technical novelties. They represent a fundamental change in how we view energy use. Americans have traditionally understood energy consumption from a supply side point of view – that is to say, our focus is on the supply, or *how* we produce our power. We typically spend a great deal of time on where our energy will come from, and little to none on how we will actually end up using it. But an energy conservation orientation focuses primarily on *end use*.

According to this point of view, we should look carefully at the services we want our energy to provide us, then we identify the most efficient and economical means for getting us there.

In addition to energy efficiency, LEED standards requires that our construction process itself be undertaken in a sustainable way. As a result, our construction plan stipulates that

100% of the concrete that constitutes our current buildings façade and front steps will be ground up and reused in our new building's foundation. This also has implications for energy consumption, since no fossil fuels will be expended in transporting new concrete to our building site.

All of the wood on the exterior of our building will be made from reclaimed cypress wood dredged from the bottom of the Great Lakes, insuring that no new trees will be cut down. Moreover, 20% of the overall building materials must be manufactured locally, and 50% of the interior wood in our facility must come from certified sustainable forests – meaning forests that do not engage in the practice of clear cutting. And then there is what I consider to be perhaps the coolest feature of all: our solar powered Ner Tamid!

During the planning for our construction, we have not regarded these features as mere bells and whistles. Thanks primarily to the inspired leadership of JRC's Environmental Task Force, we have fought hard for each and every one of these items and many others. For in the end, they represent core values that have been fundamental to our decision making process. This is indeed a new model for creating spiritual community. By committing to building our new home in this fashion, we are making the strong statement that religious conviction is not only about *what* a congregation does, but *how* it does it.

I'll put this very plainly: what I have just described to you is *huge*. It is truly unprecedented for a religious community to make this kind of commitment. And I hope our community's example can be an example to us all. I hope it will inspire each and

every one of us to take stock and imagine a fundamental shift in the way we think – and yes, the way we live. By the same token, this kind of example should also encourage us to become educated citizens – to learn about how energy works, where it comes from, and how it impacts on our world. In the broadest sense, it should raise our awareness about our current energy economy and to become advocates for a national energy policy and international agreements that will include conservation as a core value.

There is no better time than right now to take stock in this way. As I mentioned on Rosh Hashanah, this is the season of our accounting – the season of our transformation. This is the time in which we affirm that change in our lives and our world is truly possible. Let us all not only imagine a more sustainable world – let do what we can to make it so. On your way out tonight, you will find a stapled flyer that lists some very practical and do-able suggestions for living a more energy conserving life, for practicing the sacred value of *Bal Tashchit* in *your* home. Please take this flyer home with you tonight, read it carefully, discuss it with others, and think seriously about how you can personally commit to a more energy conserving lifestyle in the coming year.

Of course Kol Nidre, reminds us that not all the vows we make tonight will succeed. Indeed, despite our vows, we know we will leave this sanctuary and that we will inevitably engage in wasteful acts, whether consciously or not. There is no denying that we are, after all, part of a larger system – one that we benefit from and accommodate ourselves to in a myriad of ways. But human history has proven that systems can be changed. The first step, quite simply, is the realization that we can take responsibility for

our own lives. We know from experience that from such first steps, whole movements can be born.

This is the New Year, and this is where we must start. Kol Nidre reminds us that even though we may stumble, we must still walk the walk. May we walk that path together. May we, through all our efforts, help to realize a world sustained, a world transformed.

Amen