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Green Lingo: Upcycling vs. Downcycling

Upcycling is modifying one type of waste material into something that is of a higher environmental quality or value. Examples include; plastic bags reused as bookshelves or milk crates, or using recycles glass to make cutting boards.

Downcycling is modifying one type of waste material or unusable product into something that is of a lesser environmental quality or value. This may seem not as productive as upcycling however it still allows for a product to be re-used and diverted from the landfill and we useful a second time around. Examples include; plastic bottles reused as a lower grade of plastic or premium white paper reused as cardboard.

http://www.greenresidentialcleaning.com/managers/GREEN%20VOCABULARY%20GUIDE.pdf

Green at PARE: Narragansett Village Condominiums

PARE recently completed a fuel conversion study for the Narragansett Village Condominiums in Warwick, RI. The complex has 145 condominium units spread out over 4 buildings that are currently heated with fuel oil. The condo association requested that PARE evaluate the annual cost savings from converting the complex to natural gas heat.

Natural gas heating has many environmental benefits over oil heat. First, it burns cleaner than oil and other fossil fuels. According to the EPA, natural gas gives off approximately 30% less CO_2 and almost 90% fewer particulates than oil. Second, oil is handled from transport, delivery, storage, and use. Oil spills and leaks can occur at any time in this process, and petroleum products remain a major source of environmental degradation. The EPA estimates that spills from the production, transport, storage, and use of oil add up to as much as 25 million gallons each year.

PARE found that there were also economic benefits for the condominium association to convert to natural gas. The association could save up to $90,000 each year on heating costs by converting from oil to natural gas. With these savings, the association could see a payback period of as low as 5 years for the costs associated with converting current oil burning equipment.

Green Product of the Month: Solar Shingles

Old concept with a revised look and more efficient output of power. The old image of residential solar power included large, heavy, solar panels on racks mounted to your roof. The new solar systems or "building-integrated photovoltaics (not yet in the Word dictionary)" (BIPVs) combine solar cells with slate, metal, fiber-cement, even asphalt roofing. Individual shingles produce between 50 to 200 watts or depending on your roof size and system several kilowatts, enough to power the majority of an average size house. The output of the system will depend on orientation of the roof, obstacles over the roof, geographic location of the house, and weather. The systems are usually sized based on the square foot of the house and area of the roof. Depending on the system installed costs can run between $5 to $13 per watt installed and battery packs between $2 to $3 dollars per watt depending on the size. For more information please visit the following websites. http://www.oksolar.com/roof/ http://www.thisoldhouse.com/toh/article/0,,1205726,00.html

Green Current Events: Largest Dam Removal Project in U.S. History Commences

September 15 marked the beginning of the largest dam removal undertaking in U.S. history. The long process of dismantling the Elwha and Glines Canyon dams, located in Olympic National Park in the state of Washington, is underway. Due to the sheer size and widespread interest associated with this project, the removal of these dams is likely to serve as an inspiration and a model for other dam removal projects across the country.

The two dams were originally constructed on the Elwha River to provide electricity for a paper mill in the city of Port Angeles, Washington. As with many other dams across the country, these dams played an important role in early industrial development at the turn of the last century, but today are obsolete. A U.S. congressional act passed in 1992 paved the way for the U.S. government to acquire the dams and remove them in order to restore the river's ecosystem. After obtaining necessary funding and completing necessary modifications to the upstream infrastructure, this 351 million dollar project commences almost a decade later.

Once the dams are removed, biologists predict that the river's salmon populations will swell from their current number of about 3,000 to nearly 400,000. The return of a thriving fish population will benefit more than 130 species of plants and animals that have been deprived of a vital food and nutrient source for nearly a century.

Photos of the project's progress can be seen here: http://www.video-monitoring.com/construction/olympic/js.htm

You can read more about this project here:

http://news.nationalgeographic.com/news/2011/08/110831-dam-removal-elwha-freshwater-science-salmon/

http://www.washingtonpost.com/national/health-science/elwha-dam-removal-illustrates-growing-movement/2011/09/13/gIQAZFjtYK_story.html

Massachusetts just released a Climate Change Report: For more information go to:

http://www.mass.gov/