Sustainability in my Career

Focused Majors – Agriculture, Engineering (Civil, Mechanical), Architecture, Regenerative Studies

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Sustainability in my Career spreads awareness of current sustainability projects in the professional world. The practice is currently being infused into a variety of careers and fields. Students should be encouraged to pursue their own actions within future careers. Please visit our website for more information and opportunities.

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Technical Tours:

Fall 2015	ARTIC Anaheim Regional Transportation Intermodal Center Anaheim, CA
Winter 2015	BRIC Bronco Recreation & Intramural Complex Pomona, CA
Winter 2015	Spadra Landfill Gas-to-Energy Facility Pomona, CA
Spring 2015	Good Eggs Los Angeles, CA

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1 Good Eggs
2 ARTIC
3 Advanced Resource Recovery Facility

Li Schmidt

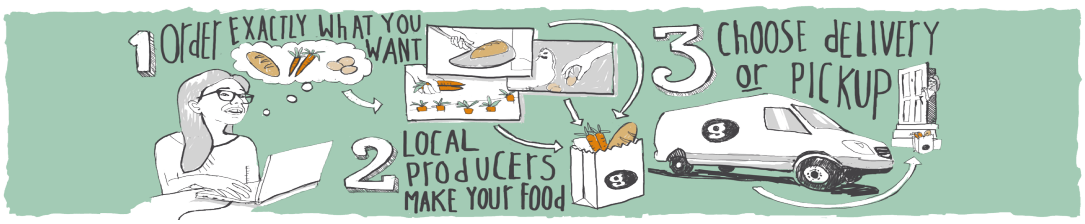
Sustainability Team

"The farmers we work with do not grow food in mono crops, thus reducing the environmental impact of their farms."

- Schmidt

Good Eggs Los Angeles, CA

The company, Good Eggs, provides a service of bringing local groceries right to its costumers. Users can use the online order form to receive food that comes from locally grown produce. Despite its tasty benefit, Good Eggs provides a service that does justice for the environment. For one, farmers and food makers reduce waste by knowing exactly how much food to make. From an interview with one of the members of the sustainability team, Li Schmidt, the company believes that local food and sustainability go hand and hand because local food takes much less energy to transport. As mentioned by Schmidt, the company does not grow food in mono crops to reduce environmental impact. This means that plants are not grown in the same place, year after year. Overall, Good Eggs has the mission to grow and sustain local food systems worldwide.



Anaheim Regional Transportation Intermodal Center *ARTIC* Anaheim, CA

The Anaheim Regional Transportation Intermodal Center, otherwise known as the *ARTIC* project, located in Anaheim, California looks to redefine transportation norms in Southern California. The facility itself introduces cutting edge sustainability practices that result in magnificent resource saving numbers. First and foremost, the materials being used will reduce energy consumption up to 50% when comparing with standard building construction practices. Indoor and outdoor water conservation fixtures and drought tolerant landscaping will reduce potable water consumption up to 55%. The frame itself introduces a 200,000 square-foot ethylene tetrafluoroethylene (ETFE) roof system provides a break through in architectural practices and was recently honored with a 2014 BIM Award from the American Institute of Architects Technology in Architectural Practice Knowledge Community. To successful design this structure, contractors from Clark worked closely with subcontractors from HOK, Parsons Brinkerhoff, and Buro Happold that focused closely on the points and arcs of this geogrid model.

Spadra Landfill Gas-to-Energy Facility Pomona, CA

Regenerative Studies explores the means of supporting human communities within the limits of available resources, and without degrading the environment. Regenerative processes are those that restore and renew their own sources of energy and materials through cyclical flows. For this reason, it goes one step further than sustainability; it does more than sustain, it renews.

After forty-three years of operation, the *Spadra Landfill*, located in Pomona, officially closed to the general public in 2000. In the 1980s, the Sanitation Districts of Los Angeles County constructed a gas-to-energy facility. The gas-to-energy facility is a conventional Rankine Cycle Steam Power Plant using landfill gas (LFG) as fuel to generate electricity. Landfill gas is fired in the plant's boiler producing superheated steam. The superheated steam is used to drive the steam turbine/generator to generate electric power. Currently, the facility produces approximately 5 MW net of electric power. The power is sold to the local utility company, Southern California Edison (SCE),

This regenerative system takes a natural process of decomposition and makes it productive without causing additional harm to the environment. In fact, further harm is prevented by this method: methane gas (a greenhouse gas) collected at the landfill is effectively managed reducing air emissions and producing significant economic benefits for landfill owners. By using boilers to combust the gas and a landfill gas pretreatment system customized for each facility, the Sanitation Districts maintain emission levels well below those required by the South Coast Air Quality Management District.

ARUP LABORATORIES

Advanced Resource Recovery Facility
San Francisco, CA

The Advanced Resource Recovery Facility in San Francisco is a wastewater treatment facility being made for the San Francisco based waste recovery company *Recology.* The engineering firm in charge of the design is the globally distributed ARUP (famous for designing the Sydney Opera House). The project is part of the city's plans to achieve zero waste to landfill by 2020. The part of the facility that is operational processes 1500 gallons of wastewater per day and ARUP hopes to fully integrate the waste solutions with all other activities on the facility, such as transportation and energy generation to ensure no waste or byproducts end up in a landfill.