

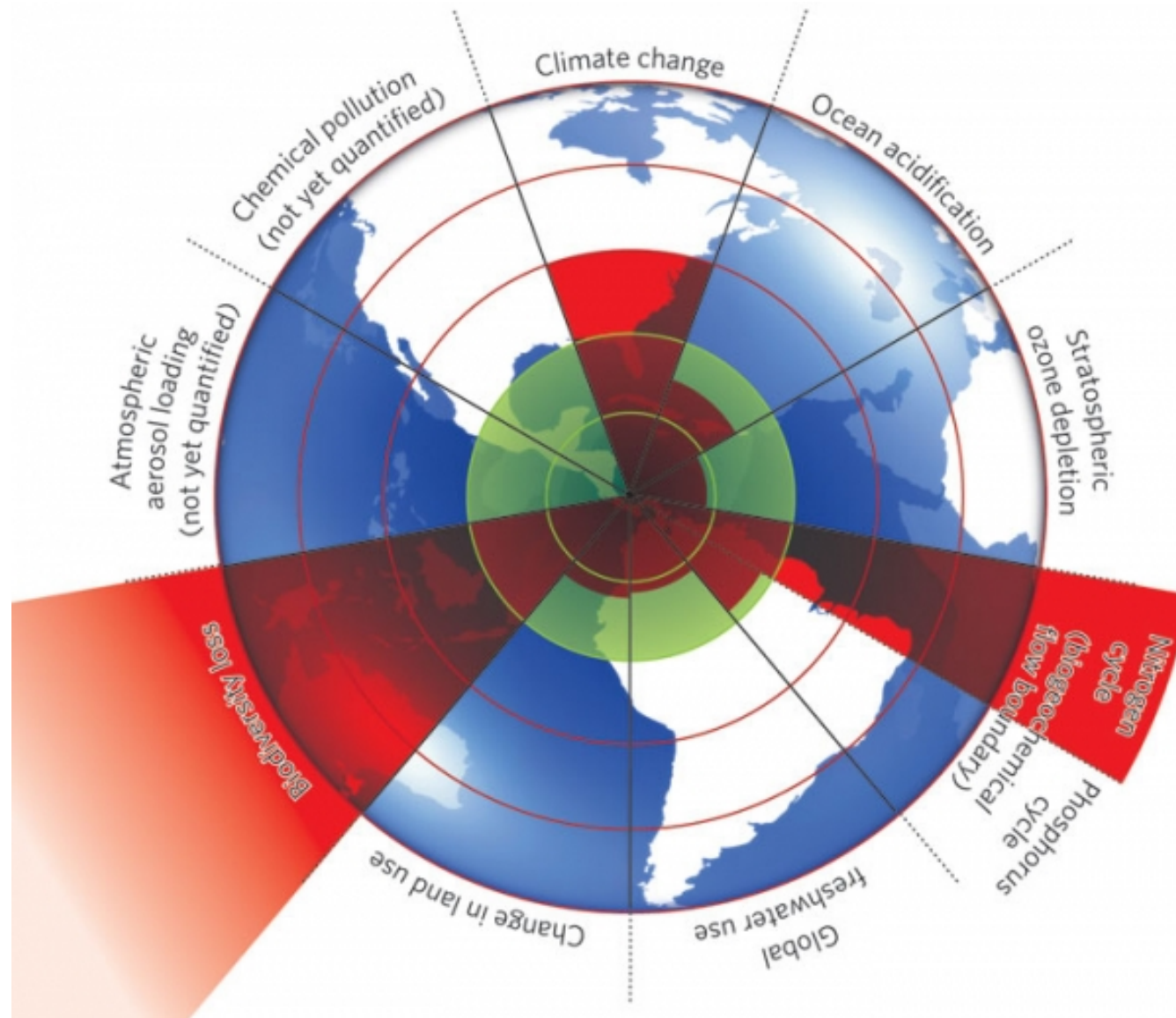


**The Jesuit's Response to the Global  
Environmental Crisis:  
Loyola University Chicago as a Case Study**

**A Presentation for John Carroll University  
January 2015**

**Nancy Tuchman, PhD, Founding Director,  
Institute of Environmental Sustainability  
Loyola University Chicago**

# Planetary Boundaries



# Ecological Footprint Concept

- ❑ Measures how much land and water area a human population requires to produce its resources and accommodate its wastes.
- ✓ The average ecological footprint in the United States is 24 ACRES PER PERSON.
- ✓ Worldwide, there are 4.5 BIOLOGICALLY PRODUCTIVE ACRES PER PERSON.

**If everyone lived like us, it would require 5.3 Earths to sustain the World population**

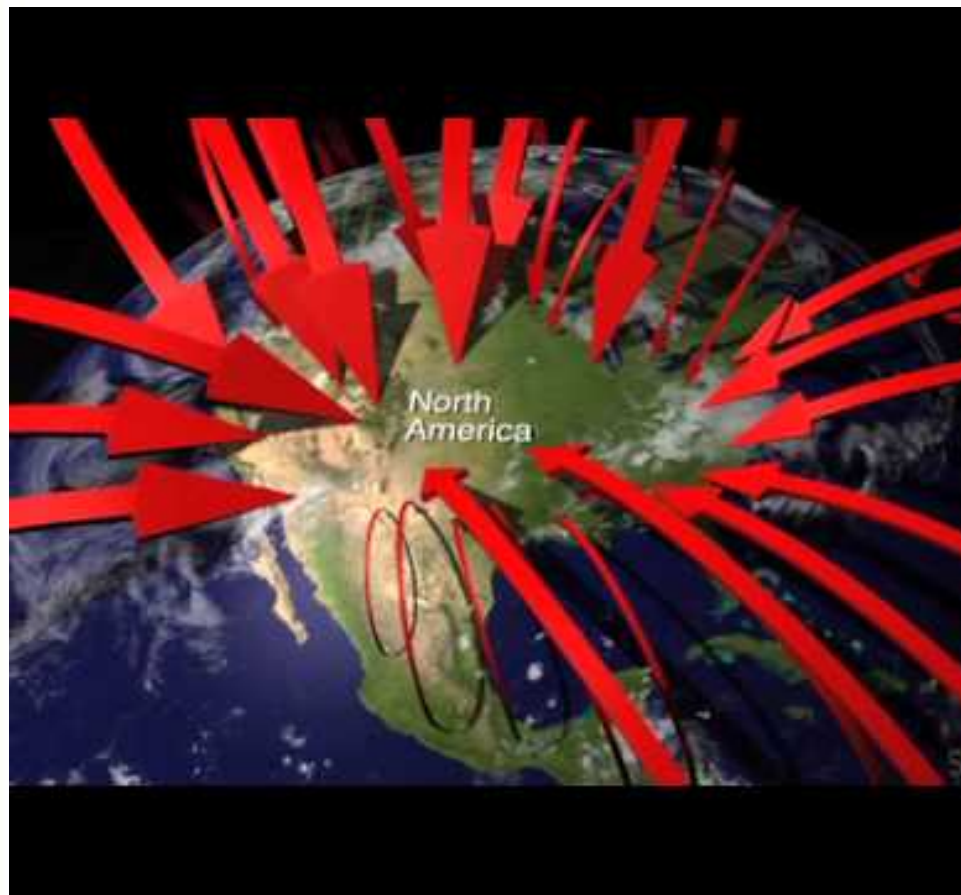


# The Environmental Crisis is a Justice Crisis

**Floods, droughts, wildfires, rising sea levels and intense storm events disproportionately effect the marginalized.**



**By 2050 there will be an estimated 1 billion climate refugees.**



## CLIMATE REFUGEES

TO THE RESIDENTS OF  
A M E R I C A  
WITHIN THE NEXT FEW YEARS  
MILLIONS OF PEOPLE ARE GOING  
TO HAVE TO LEAVE THEIR HOMES  
BECAUSE CHANGES IN THE WORLD'S  
CLIMATE WILL DESTROY THE BASIS  
FOR THEIR LIVELIHOODS -  
I DECLARE THE CITY OF  
LOS ANGELES - NY - DC - SF  
A CLIMATE REFUGEE CAMP.  
PLEASE WELCOME AND GIVE HOME TO  
ALL WHO HAD TO LEAVE THEIR HOMES.  
[WWW.CLIMATE REFUGEES.COM](http://WWW.CLIMATE REFUGEES.COM)

# The Jesuits Respond

- ❑ Secondary Education Directorate
- ❑ Higher Education Directorate
- ❑ Social Justice and Ecology Directorate
- ❑ Service of Faith Directorate
- ❑ Development Resources Office





# Shaping the Future

"Networking Jesuit Higher Education for the Globalizing World: Shaping the Future for a Humane, Just, Sustainable Globe"

Organized by the late Paul Locatelli, S.J.,  
Secretary for Jesuit Higher Education  
and the Intellectual Apostolate



Universidad Iberoamericana, Ciudad de Mexico  
April 21 – 25, 2010



*Preparing people to lead extraordinary lives*

# Mexico City Conference Outcomes

Father Aldofo Nicolás, Superior General of the Society of Jesus, Developed the Task Force on Ecology

**Father Aldofo Nicolás,  
S.J., Superior General**



**Father Ronald  
Anton, S.J.,  
Secretary of Higher  
Education**

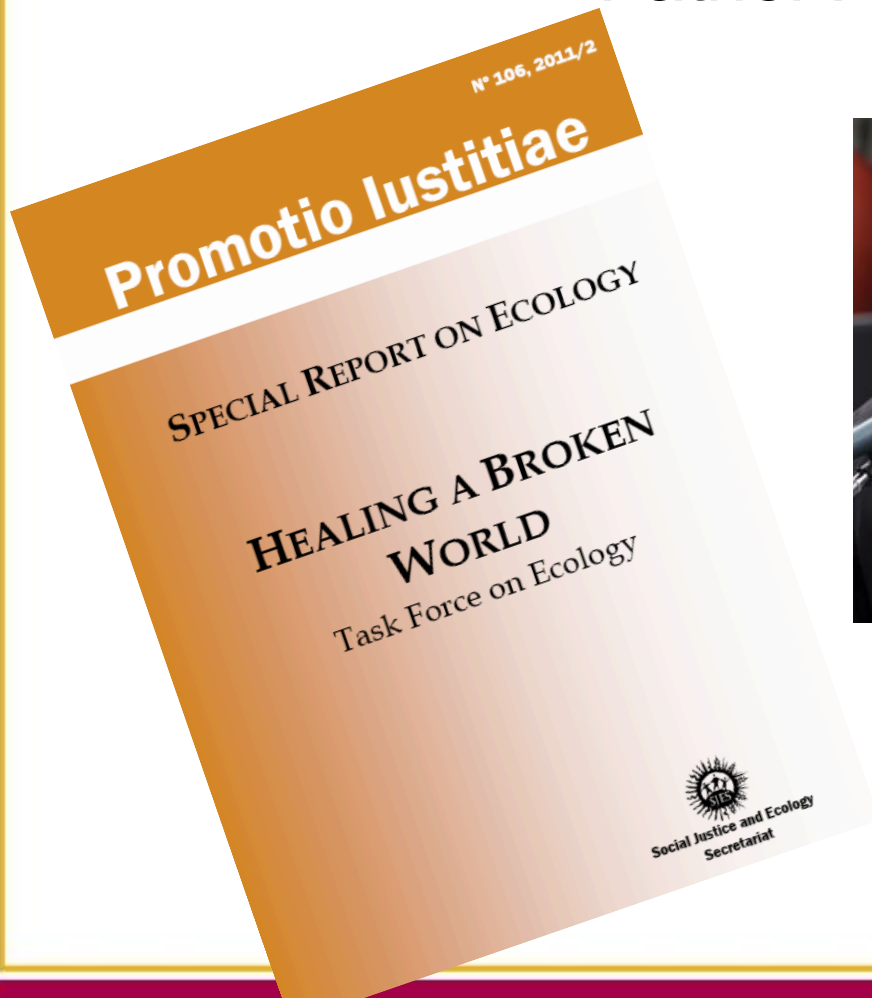
**Father Fernando  
Franco, S.J., Secretary  
of Social Justice and  
Ecology**





# Ecology Task Force Outcomes

## Ecology Task Force Recommendations to Father Aldo Nicolás



**Father Michael J. Garanzini, S.J.,  
Secretary of Higher  
Education**



**Father Paxti Alvarez,  
S.J., Secretary of  
Social Justice and  
Ecology**

# *Healing a Broken World*

## **Recommendation 4: Universities**

- ❑ Develop *experiential learning environments* where students are immersed in real-world environmental issues, learn to develop solutions, and are transformed by the experience.
- ❑ Develop an *environmental ethic* on campuses so that conservation practices become socially normative and students lead by example.
- ❑ Develop *curricula* that address sustainability issues and impart an environmental literacy.



# Loyola University Chicago's Response to the Global Environmental Crisis

## Two-pronged approach

Energy Efficiency

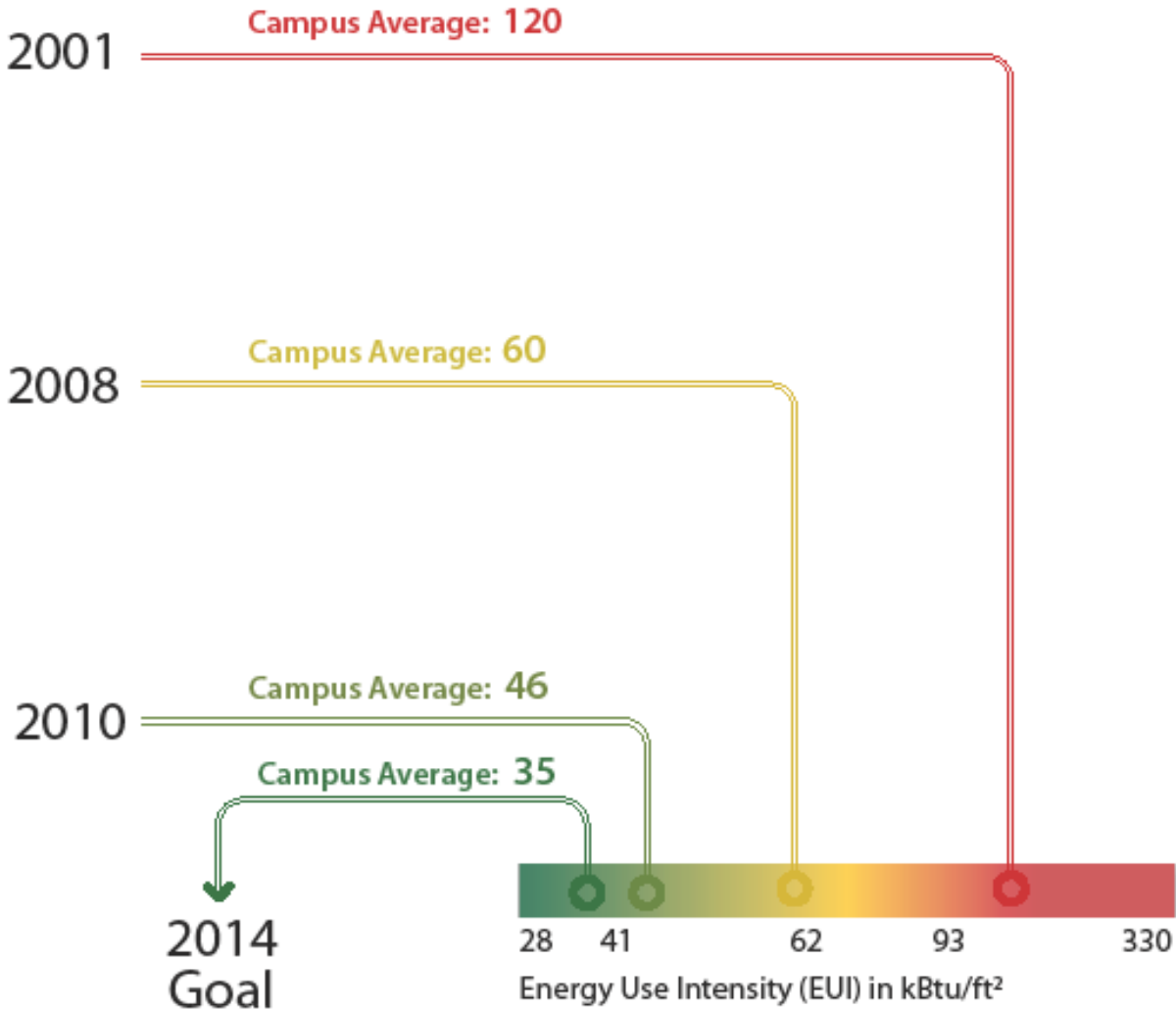
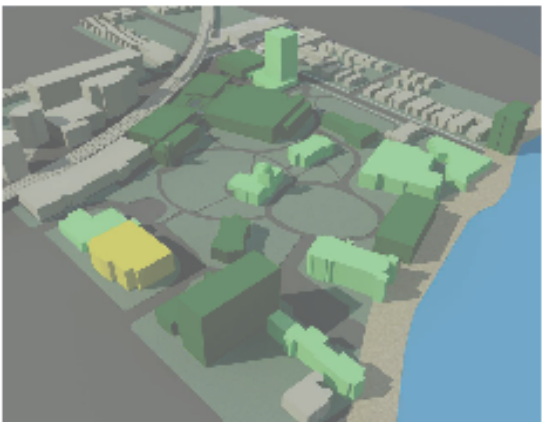
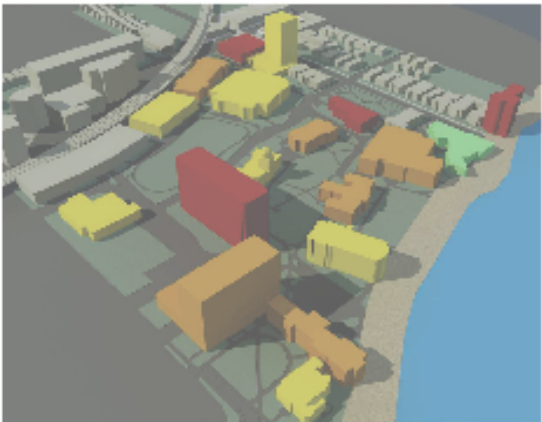
Education



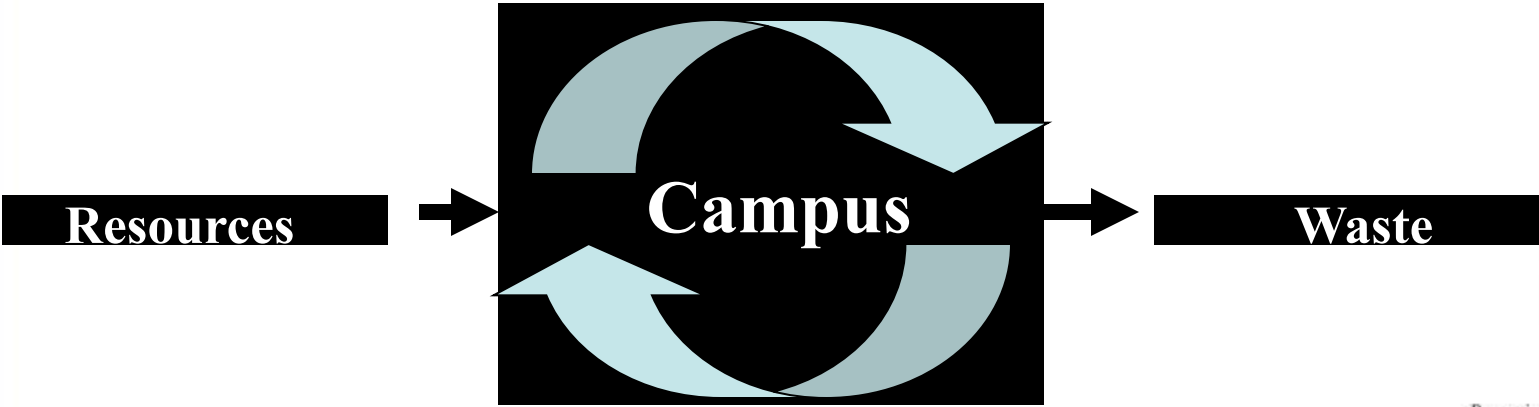
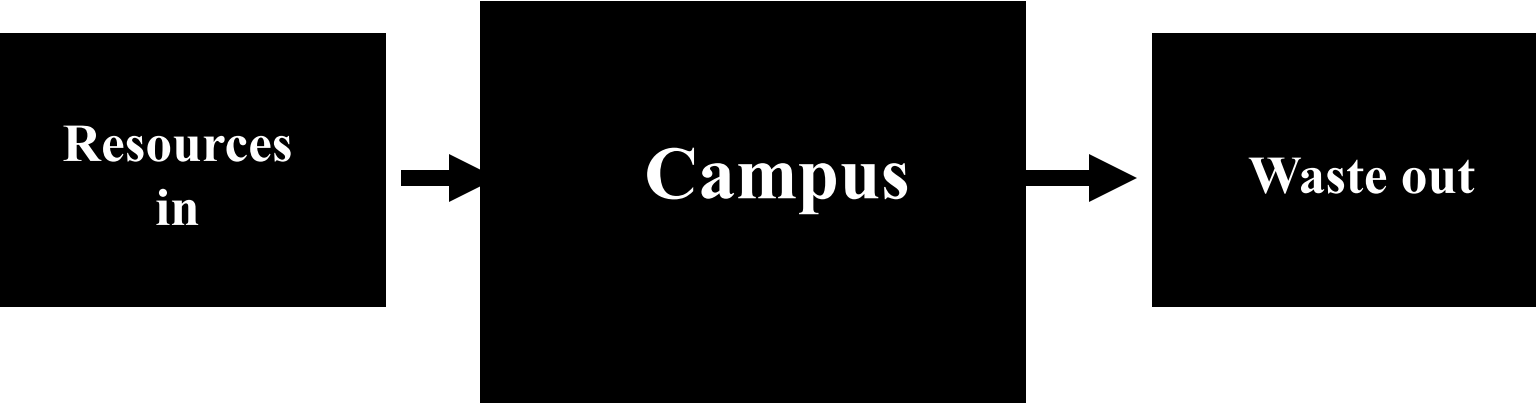
# Loyola University Chicago Energy Improvement Plan



August 2014



# - Raising Awareness - A Conservation Ethic Model



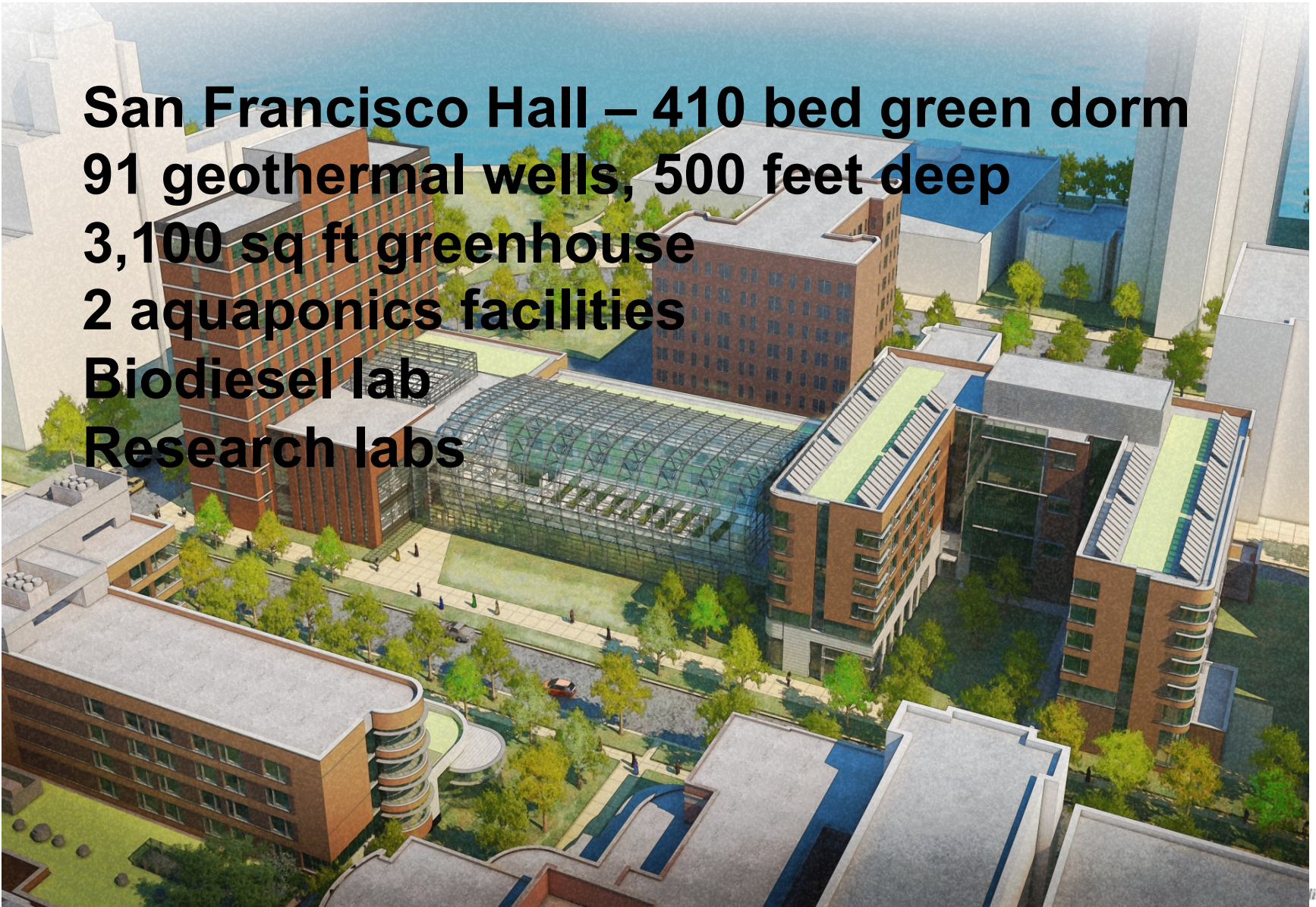
# The new IES Facility

launched September, 2013



# The new IES Facility

**San Francisco Hall – 410 bed green dorm**  
**91 geothermal wells, 500 feet deep**  
**3,100 sq ft greenhouse**  
**2 aquaponics facilities**  
**Biodiesel lab**  
**Research labs**



# Increasing Environmental Literacy through the University Core Curriculum

*Loyola requires every student,  
regardless of their major, to take  
an Environmental Issues course*





# IES Curriculum

❑ **Interdisciplinary** - Science, Business, Policy, Public Health, Sociology, Ethics , Economics

❑ **Majors**

- Environmental Science
- Conservation & Restoration
- Sustainable Agriculture & Food Systems
- Environmental Studies
- Environmental Policy

❑ **5-year dual degree programs**

- ENVS/Masters in Business Administration
- ENVS/Master's in Public Health
- ENVS/Master's in Public Policy



# Co-curricular activities



- biodiesel program
- recycling
- rooftop gardens (QLSB, Mertz)
- Winthrop lot garden
- LUC Farmer's Market
- Student Environmental Clubs



# Biodiesel Program

## Turning Campus Waste into Energy



# JCU Sustainability efforts, *Did you know...*



- ❑ 9 Departments teach over 22 courses in environmental science and sustainability
- ❑ JCU repurposed over 21 tons of furniture for relief in Guatemala and the Dominican Republic
- ❑ JCU composts all of its cafeteria plate waste
- ❑ “Don’t Throw it Away...Give it Away” residence hall program donated ½ ton of clothes, food and toiletries to charity the last 3 years



# JCU Sustainability efforts, *Did you know...*



- ❑ 9 Department courses in sustainability!
- ❑ JCU re...ure for public!
- ❑ JCU ...aste!
- ❑ "Don't Throw Away" hall program donates food and toiletries to charity the local...



# Fr. General Calls for Collaboration

- ❑ Leveraging resources for a call to action among our Universities
  - globally
  - nationally
  - regionally



# International Jesuit Ecology Project

**Higher Ed  
Directorate  
Project involving  
50 Jesuit  
universities.**

**Will debut at the  
Melbourne  
meetings in July  
2015.**



***Healing Earth***

**is a**

**free electronic textbook**

**in**

**environmental science**

**for**

**First-year college students**

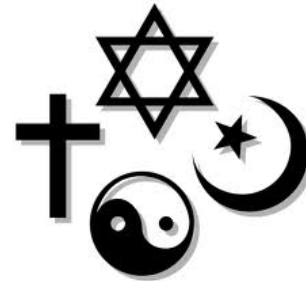
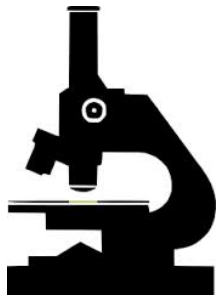
**and**

**Advanced secondary school students**





***Healing Earth* takes a  
unique approach  
to environmental science  
by integrating  
science, ethics, spirituality &  
action**



[www.healingearth-dev.ijep.net](http://www.healingearth-dev.ijep.net)



*Preparing people to lead extraordinary lives*

# Climate Change Conference

*To Tend the Earth: Responding to the Global Climate Change Crisis*



**Loyola University Chicago's  
Second Annual Climate Change Conference**

**March 19-21, 2015**

*In collaboration with:*

**Creighton University, John Carroll University, Marquette University,  
Xavier University and University of Detroit Mercy**



# Climate Change Conference

*To Tend the Earth: Responding to the Global Climate Change Crisis*



**Workshop I** - Sustainable Asset Sharing

**Workshop II** - Divestment from Fossil Fuels

**Workshop III** - Leveraging our curricula through online course-sharing



*Preparing people to lead extraordinary lives*

# Let's Collaborate!



*Preparing people to lead extraordinary lives*