

Sustainability in the Workplace



Mark Gelfo

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Principal, Director of Sustainability

Who is TLC?

www.tlc-engineers.com

- ✓ Engineering Design Firm
- ✓ High Performance Building Design
- ✓ 300 Staff
- ✓ 11 Offices
- ✓ Sustainability
- ✓ Energy Services



The Workplace Challenge: Sustainable...

- ✓ Business Practices
- ✓ Engagement, Education & Training
- ✓ Marketing & PR
- ✓ Community Impact
- ✓ Fun!







GREEN WEEK 
SHARING Sustainable SOLUTIONS

SEPTEMBER 24 - 28, 2012



GREEN WEEK 
WORKING & LIVING SUSTAINABLY

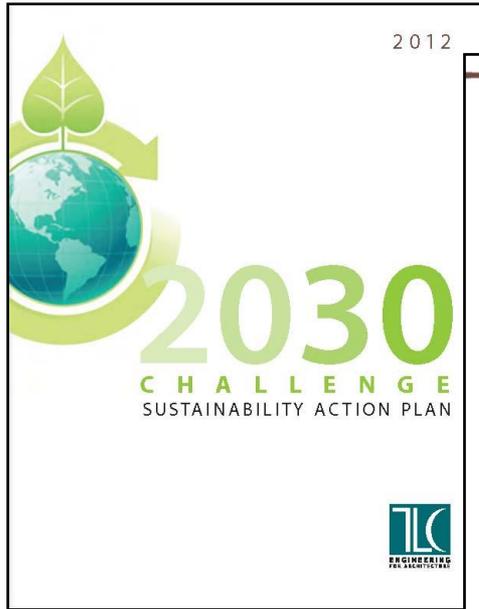
SEPTEMBER 23 - 27, 2013



GREEN WEEK 
SHARING HIGH PERFORMANCE IDEAS

SEPTEMBER 22 - 26, 2014

Sustainable...



2012

2030 CHALLENGE
SUSTAINABILITY ACTION PLAN



SUSTAINABLE BUSINESS PRACTICE
ONGOING INITIATIVES/ACHIEVEMENTS

PAPER/RECYCLING

Amway Center
LEED NC v2.2 Gold

- Every TLC office recycles paper/cardboard/glass/plastic/aluminum and appropriately located bins are available throughout the offices. In some offices, wastebaskets at work stations have been replaced with a recycle receptacle with a centrally located 'waste bin' for non-recyclable waste.
- TLC pay statement and expense reporting and reimbursements are handled electronically, as are Continuing Education Requests and other Human Resources related documents.
- Firm financials are available electronically on-line to all staff members.
- New employee orientation has become as paperless as practical. The Day 1 Welcome to TLC package is delivered via email with hyperlinks to all referenced documents.
- All marketing materials are provided electronically to TLC Offices.

ENERGY/WATER

- TLC's procurement policy permits only the purchase of Energy Star compliant appliances and equipment, if the class of equipment is Energy Star rated.
- Incandescent lamps are prohibited under the procurement policy, along with polystyrene (Styrofoam) plates, cups, bowls, etc. in our break rooms/kitchens.
- If policy mandates that computers are in 'hibernate' mode overnight, allowing for updates/ upgrades to be 'pushed' while minimizing the energy consumption.
- Corporate wide printers and other office equipment manually powered down at the end of each day.
- Duplex printing is the default option for those printers capable; duplex printing is required for all practical situations.
- Coffee makers are powered-down or unplugged at the end of the day.
- Space and task lighting is manually turned off before sensors are not currently deployed at the end of the day or when not necessary.

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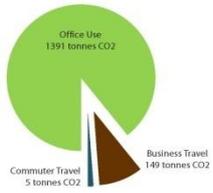
TLC Engineering For Architects
2012 Sustainable Action Plan

BENCHMARK

As management consultant Peter Drucker has said: **"If you don't measure it, you can't manage it."**

Our focus in 2011 was to benchmark energy use within our offices, commuter travel and business travel on behalf of our clients, for business development and training. Surveys of commute distance, analysis of flights and rental cars, along with gathering energy data via audits if individually metered data was not available, resulted in the collection of data provided below. With this data in hand, it was clearly evident that the greatest opportunity to make meaningful change lies in focusing on our office energy use.

While we will invest efforts to reduce travel through video conferencing and other means, along with identifying opportunities for mass transit options and other commuter travel reduction, the bulk of our efforts will focus on reducing energy use in our offices.



Office Use
1391 tonnes CO₂

Business Travel
149 tonnes CO₂

Commuter Travel
5 tonnes CO₂



Tallahassee Memorial Hospital
Cancer Treatment Center
LEED NC v2.2 Silver
(Photo by official Architectural Photograph)

Tide Water Authority
Administration Building
LEED NC v2.2 Gold
(Photo courtesy of TWT Design)

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FUTURE SUSTAINABLE PRACTICES

In addition to our focus on office energy reduction, 2012 will bring additional identification and refinement of office procedures and processes that further minimize paperwork, reduce travel through expanded use of video teleconferencing and raise awareness of all TLC staff towards the over-arching goals of the 2030 Commitment as we live sustainably in our offices. Additional benchmarks will define future steps. As data is gathered, initiatives will be expanded, refined and enhanced with quantifiable goals. We will continue to focus our internal efforts for 2012 and the future in three areas.

EDUCATION

- The 2012 version of TLC's 2030 firm-wide quiz will focus on the results achieved to date and updated Sustainability Action Plan, along with the Energy Star Target Finder, CBECS Site Energy Use data and other tools available for use in evaluating/improving existing buildings, a significant percentage of our work. The TLC division who reaches the highest participation level in a defined period will be recognized firm-wide and be rewarded with a pizza lunch.
- The Tech Know How group and REC/CM are committed to regular presentations to the staff based on projected participation level, (should result in newly weekly sessions) to help disseminate knowledge on proven sustainable strategies, along with introducing newer technology and products as they are evaluated. Topics already presented include updates on LEED 2012, the Living Building Challenge, chilled beams, liquid desiccant dehumidification and more.
- Annual updates of TLC's 2030 Commitment, Sustainability Action Plan and quarterly results will continue to be shared across the firm via firm wide conference, lunch and learn sessions and quarterly divisional meetings.
- Several TLC staff members have been invited to join support academia at various higher education institutions where they are involved in creating and instructing sustainability and sustainable design programs to influence future designers and constructors.



State College of Florida
Medical Innovation Building
LEED NC v2.2 Gold



Medical Technology and Simulation Center

TLC Jacksonville Office
LEED v2.2 Silver

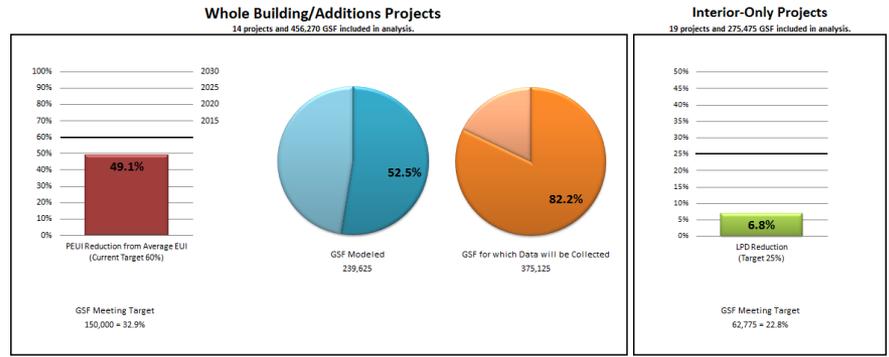
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Business Practices

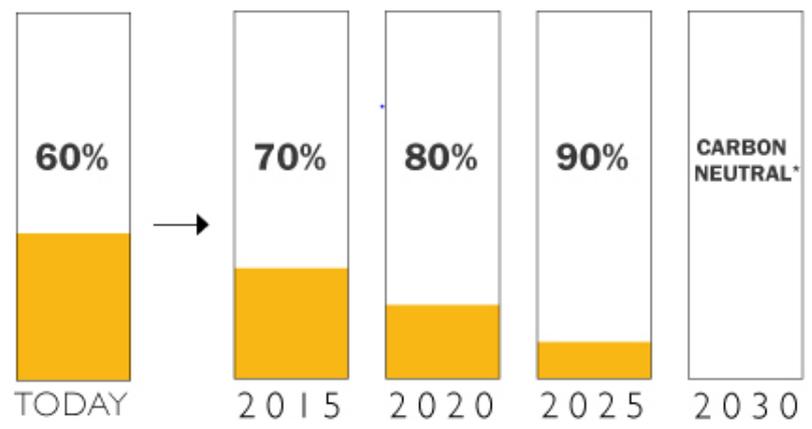
ADOPTER



AIA 2030 Commitment Annual Report
TLC Texas
 Design Work 2013



The Problem: The Building Sector
 The Solution: The Building Sector

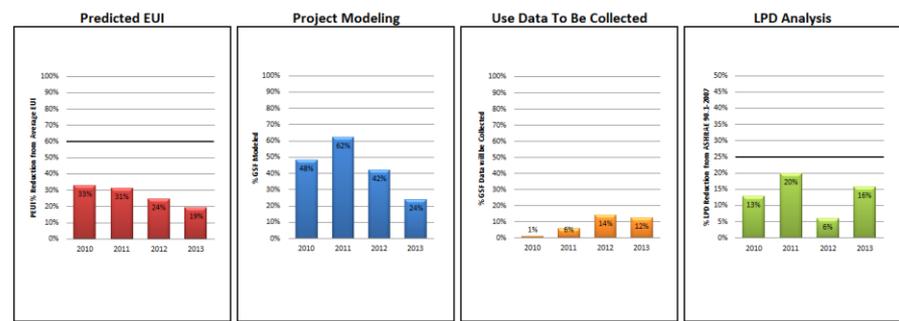


□ Fossil Fuel Energy Reduction ■ Fossil Fuel Energy Consumption

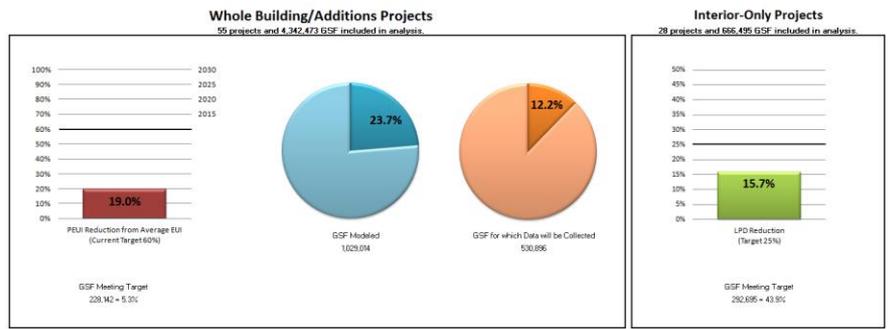
The 2030 Challenge

Source: ©2010 2030, Inc. / Architecture 2030. All Rights Reserved.
 *Using no fossil fuel GHG-emitting energy to operate.

Internal Analysis Progress
TLC Engineering for Architecture
 Design Work Year-to-Year Progress



AIA 2030 Commitment Annual Report
TLC Engineering for Architecture
 Design Work 2013



Carbon Footies
ROCK!



TLC ENGINEERING FOR ARCHITECTURE
JACKSONVILLE
COMMERCIAL OFFICE

ALD, Inc.
TLC Engineering
for Architecture

LEED Features Include

- Daylighting for 88% of Occupancy
- Energy Efficient for 96% of Occupancy
- 11% Recycled Material
- 37 sq Regional Material
- Recycle Storage & Storage & Changing Room
- 21% Reduction in Lighting Power Usage
- 97% Energy Star Appliances
- 100% Low VOC Adhesives & Sealants
- 100% Low VOC Paints & Coatings
- 100% Low VOC Carpet
- 100% Low VOC Composite Wood Products
- 100% Low VOC Furniture & Furnishings
- Chemical & Ink Level Source Control
- Construction PM2 Management Plan
- 37% Of Area of Construction & Demolition Waste Diverted from Landfill
- 4% Resource Reuse (Doors & Ceiling)
- 82% Resource Reuse - Furniture & Furnishings
- Community Connectivity
- Access to Public Transportation
- Low-Voltage Lighting



Match the mug to the Big Broke
Match the mug to its rightful owner and win a prize!

1 Debra Lupton
2 Kim Shin
3 Brett McKinstry
4 Mark Goff
5 Bill Duke



Sustainable...

Engagement Education Training







Sustainable...



Marketing & PR

SAVE THE WEEK





GREENWEEK
SHARING Sustainable SOLUTIONS

SEPTEMBER 24 - 28, 2012

During TLC's first annual Green Week, we invite you to join us for lunch in your local TLC office as we hear from industry leaders on sustainable design topics.

Monday: Kirk Teske, AIA, LEED AP BD+C, Chief Sustainability Officer - HKS Architects

Tuesday: John Scott, RPA, VP of Property Management - Colliers International; President, Commercial Real Estate Energy Association

Wednesday: Jose Gelabert-Navia, AIA, LEED AP BD+C, Managing Director, Miami Office - Perkins +Will

Thursday: Mara Baum, AIA, LEED AP BD+C, EDAC, Sustainable Healthcare Design Leader - HOK

Friday: Peter Templeton, President, Green Building Certification Institute (GBCI)

Mark your calendars and watch your email box for more information soon!

LEAN AND GREEN

TLC ranked #51
in ENR's 2012
Top 100 Green
Design Firms



Building owners are seeking more than just energy savings...

"There is a focus on reducing energy use, reducing water use, commissioning, measurement and verification, and other sustainable practices that have real operational savings and return on investment."

ENR "The Top 100" July 2, 2012 issue

Mark Gelfo, PE, LEED AP BD+C, LEED AP O+M, CxA
TLC Principal / Director of Business Development and Sustainability

If you're interested in being LEAN AND GREEN, contact TLC.
Click here to reach our website.









GREENWEEK
WORKING & LIVING SUSTAINABLY

SEPTEMBER 23 - 27, 2013

We came, we saw, we listened, we learned!

TLC's second annual award-winning **GreenWeek** was a huge success! Our guests, design and construction partners and TLC staff heard from thought leaders and participated in green activities at all of our offices, then spread our commitment to sustainability through **Green Apple Day of Service** events.

We're already planning **GreenWeek 2014**..... featuring Bon Jovi in concert!! Oh wait... that's **GREENBUILD**... So if you're in Philadelphia for **GREENBUILD 2013** next month, don't miss TLC's Kim Shinn speaking on **"LEED for Healthcare - Lessons Learned in the First Three Years."**

www.tlc-engineers.com

Mechanical · Electrical · Plumbing · Fire Protection · Structural · Communications & Technology · LEED · Commissioning · Energy Engineering

Click here to see images of TLC's 2nd Annual Green Week!





Sustainable...

Community Impact

GREEN  APPLE ^{Sept}
DAY OF SERVICE ²⁹
2012

Join us.

mygreenapple.org





The Center for Green Schools at the U.S. Green Building Council presents

GREEN APPLE DAY OF SERVICE

THE CENTER FOR GREEN SCHOOLS THANKS YOU FOR HOSTING A PROJECT FOR THE

2012 GREEN APPLE DAY OF SERVICE

ON SEPT. 29, 2012, MORE THAN 1,250 SERVICE PROJECTS TOOK PLACE IN 49 COUNTRIES ON EVERY CONTINENT AROUND THE WORLD TO MAKE OUR SCHOOLS HEALTHIER, MORE SUSTAINABLE PLACES TO LEARN.

OCTOBER 9, 2012

DATE ISSUED

RACHEL GUTTER, DIRECTOR
CENTER FOR GREEN SCHOOLS AT
THE U.S. GREEN BUILDING



SEPTEMBER 23 - 27, 2013

Join TLC North Florida Operations on Tuesday, September 24 for "PURGE YOUR PANTRY" part of our Green Week celebration.

Please bring in canned goods or non-perishables to support:



Listen in on "Sustainable Food Systems," presented by John Rife, Owner & Founder of East End Market Orlando, as he discusses the benefits of buying, growing, eating local, farm to table and supporting a local sustainable food system.



Noon to 1PM
1650 Prudential Drive, Suite 200 - Jacksonville, Florida 32207
Please RSVP by Friday, September 20th - Call Kim Jowers at 904-396-8355 or click the link below

PROCLAMATION

- WHEREAS:** The Green Apple Day of Service brings together thousands of students, teachers, parents and community leaders from around the globe to improve our school environments through service projects, education, community events and more; and
- WHEREAS:** With a vast network of champions, the Green Apple Day of Service focuses on transforming all schools into healthy, safe and productive learning environments; and
- WHEREAS:** The primary goal of the Green Apple Day of Service is to raise awareness about the growing importance of creating green schools so that all students may learn in healthy buildings; and
- WHEREAS:** The North Florida Chapter of the U.S. Green Building Association works to create a sustainable region and green buildings for everyone through open and collaborative education and leadership efforts; and
- WHEREAS:** The City of Jacksonville joins the North Florida Chapter of the U.S. Green Building Association in recognizing the Green Apple Day of Service.

NOW, THEREFORE, I, ALVIN BROWN, by virtue of the authority vested in me as mayor of Jacksonville, Florida, do hereby proclaim September 28, 2013 as

GREEN APPLE DAY OF SERVICE

in Jacksonville and encourage all citizens to learn more about the potential benefits of Green Apple Day of Service and the U.S. Green Building Council North Florida Chapter.



IN WITNESS THEREOF, this day of
in the year Two Thousand

MAYOR

CITY OF JACKSONVILLE, FLORIDA, do hereby pro



CITY OF ORLANDO



Proclamation

- WHEREAS:** TLC Engineering for Architecture is a leader in sustainable building design and consulting consistently ranked among the Top 100 Green Design Firms, having providing more than 20 million square feet of sustainable space through the USGBC LEED certification of 78 projects across the country; and
- WHEREAS:** they are among the largest engineering and energy consulting firms in the U.S. with headquarters in Orlando and offices across Florida, Texas and Tennessee and more than 300 employees, providing mechanical, electrical, plumbing/fire protection and structural engineering for a wide variety of building types as well as energy services including building commissioning, energy audits and LEED consulting; and
- WHEREAS:** TLC Engineering for Architecture is celebrating its first annual Green Week with events that include nationally recognized thought leaders in sustainable design addressing TLC staff and guests each day via activities that encourage energy and waste reduction, recycling and knowledge sharing among staff through an energy modeling competition and firm-wide participation in the USGBC's first Green Apple Day of Service with the Center for Green Schools.

NOW, THEREFORE, I BUDDY DYER, Mayor of the City of Orlando, hereby do Proclaim Monday, September 24 - Friday, September 28th, as

"TLC ENGINEERING FOR ARCHITECTURE GREEN WEEK"

in the City of Orlando.

IN WITNESS WHEREOF, I hereunto have set my hand and caused the Seal of the City of Orlando to be affixed this 24th day of September, 2012.



MAYOR

GREEN APPLE DAY OF SERVICE

in Jacksonville and encourage all citizens to learn more about the potential benefits of Green Apple Day of Service and the U.S. Green Building Council North Florida Chapter.



IN WITNESS THEREOF, this day of
in the year Two Thousand

MAYOR

CITY OF JACKSONVILLE, FLORIDA

Sustainable...



Fun!



You're All Invited...



GREENWEEK 

SHARING HIGH PERFORMANCE IDEAS

S E P T E M B E R 2 2 - 2 6 , 2 0 1 4

www.tlc-engineers.com