INFORMATION DESIGN AND THE PSYCHOLOGY OF BEHAVIORAL CHANGE

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Usability.org

The purpose of visualization
is insight
not pictures.

6,255
ADD
NEW GOALS!
NEW GOALS!
NEW GOALS!

MANAGING THE GENERAL STORE
It's not easy, managing the general store. But Hank's a cheerful man and a hard worker. He gets stuff done.
Harvest Ten Tomatoes
0/10
UNLOCK FOR 20
Listen to One Bad Joke from Hank
0/1
UNLOCK FOR 6
Clear Five Debris
0/5
UNLOCK FOR 10
HINT:
Click on Hank to hear the joke of the day. (They're ALL bad!) If you haven't got any debris, clear a space on your homestead and wait a bit.
OKAY
Chat (15)

Engage
Educate
Guide

Why great information designs don't evoke change

We *designers* forget the conversation part.

What You Need To Know About Energy

UNDERSTANDING EFFICIENCY ▸

OUR ENERGY SYSTEM ▸

At Home

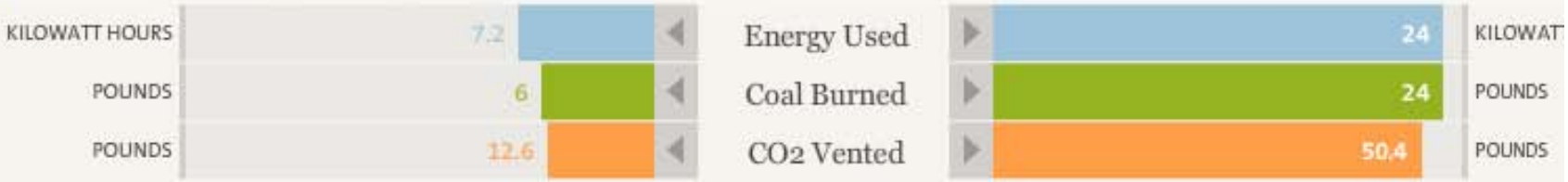
Compare the efficiency of these appliances:

- Televisions ▸
- Lightbulbs ▸
- Washing Machines ▸

36% of the original energy

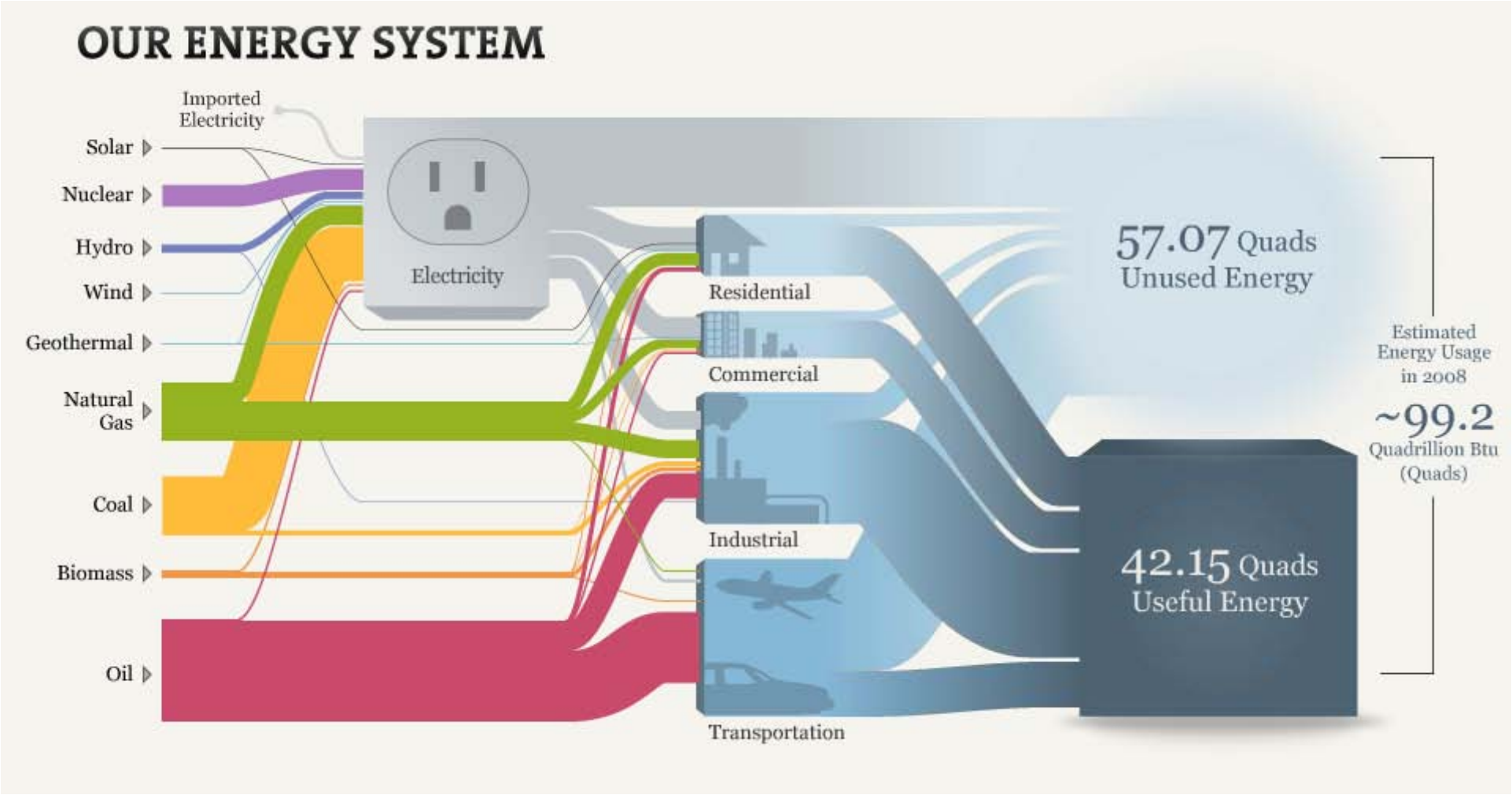
Compact Fluorescent Light

Incandescent Light



The data above represent approximate values. Energy used represents both the "useful" energy and energy lost due to inefficiencies and thermodynamic limitations. Roll your mouse over each set of data for further explanations.

Information … because we can.



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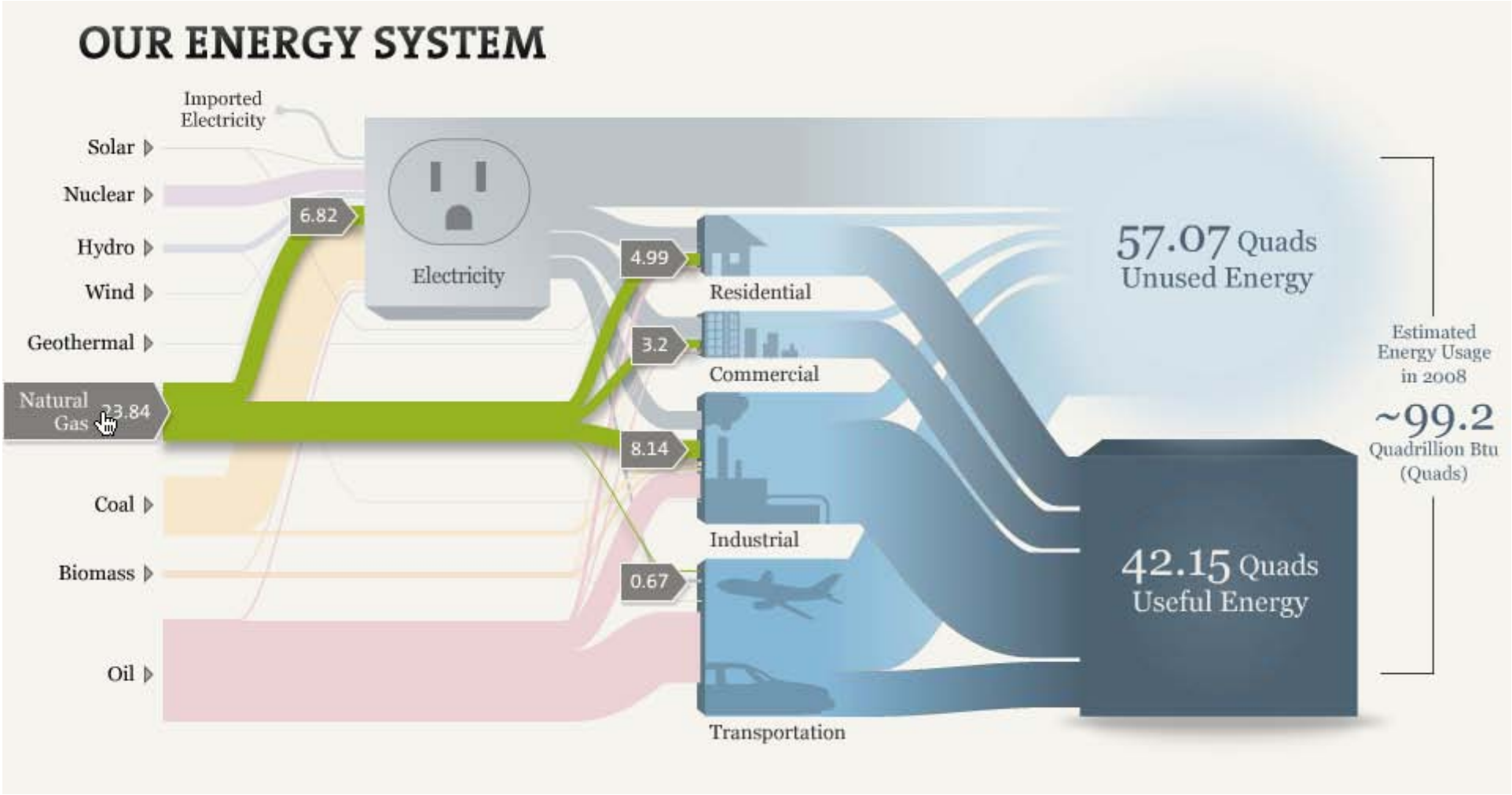
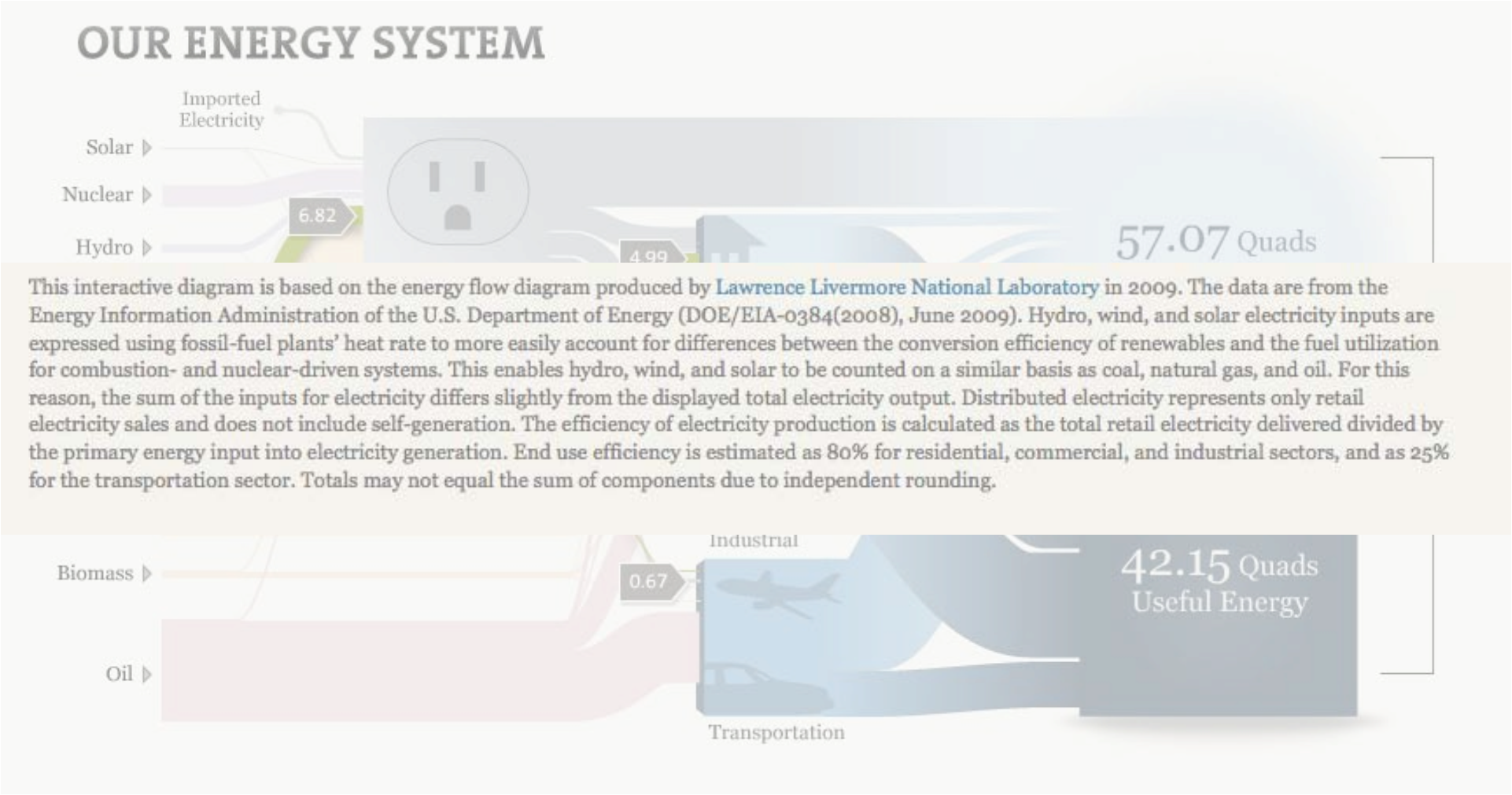


Information for information's sake



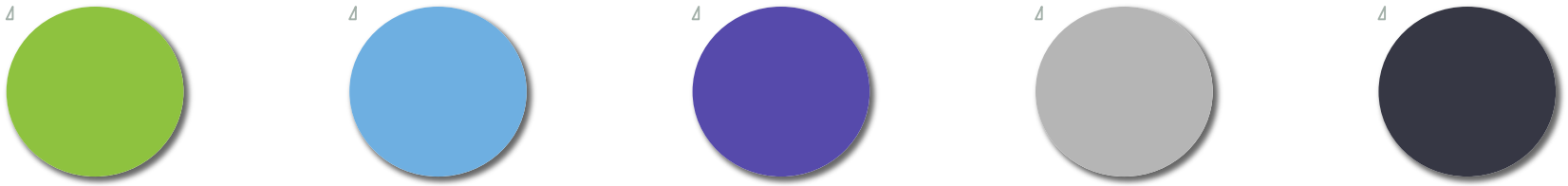
In our enthusiasm,
we forget to remind people
why they care and
to tell them what to do …

Energy Monitor
OUTSIDE TEMP 36 °F
ENGINE
BATTERY
ELEC. MOTOR
Consumption
Current 0.0 MPG
DISPLAY
INFO
CLIMATE
AUDIO
MENU
DEST
MAP
VOICE
1053
H
M
ODO
TRIP
km/h
MPH

70
80
90
140
160
100
180
110
120
Efficiency Leaves
Indicates short term efficiency. The more leaves and vines that are displayed, the more efficiently you're driving.
1 of 5

But, how do I make
the leaves grow faster?

CREATING HABITS



	GREEN Do new behavior	BLUE Do familiar behavior	PURPLE Increase behavior intensity	GRAY Decrease behavior intensity	BLACK Stop existing behavior
DOT One time	GREEN DOT *Do a new behavior one time*	BLUE DOT *Do familiar behavior one time*	PURPLE DOT *Increase behavior one time*	GRAY DOT *Decrease behavior one time*	BLACK DOT *Stop behavior one time*
SPAN Period of time	GREEN SPAN *Do behavior for a period of time*	BLUE SPAN *Maintain behavior for a period of time*	PURPLE SPAN *Increase behavior for a period of time*	GRAY SPAN *Decrease behavior for a period of time*	BLACK SPAN *Stop behavior for a period of time*
PATH From now on	GREEN PATH *Do new behavior from now on*	BLUE PATH *Maintain behavior from now on*	PURPLE PATH *Increase behavior from now on*	GRAY PATH *Decrease behavior from now on*	BLACK PATH *Stop behavior from now on*

Fogg Behavioral Model - http://www.behaviormodel.org/

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Behavior = **Motivation**
Ability
Triggers

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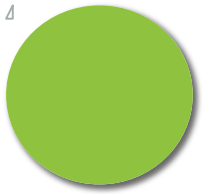
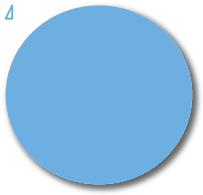


Ability holds me back

Unfamiliar behavior
just once

Fear holds me back

Unfamiliar behavior
for some time



Timing holds me back

Familiar behavior
just once

Size of

Commitment holds me back

Familiar behavior
from now on

Green and blue dot behaviors
fail to transition to blue paths
because we try to do
too much too fast

Sequencing and Behavior Chains

Fogg Behavioral Model - http://www.behaviormodel.org/
But see also Pavlov, Skinner,…

BACK TO INFORMATION VISUALIZATION

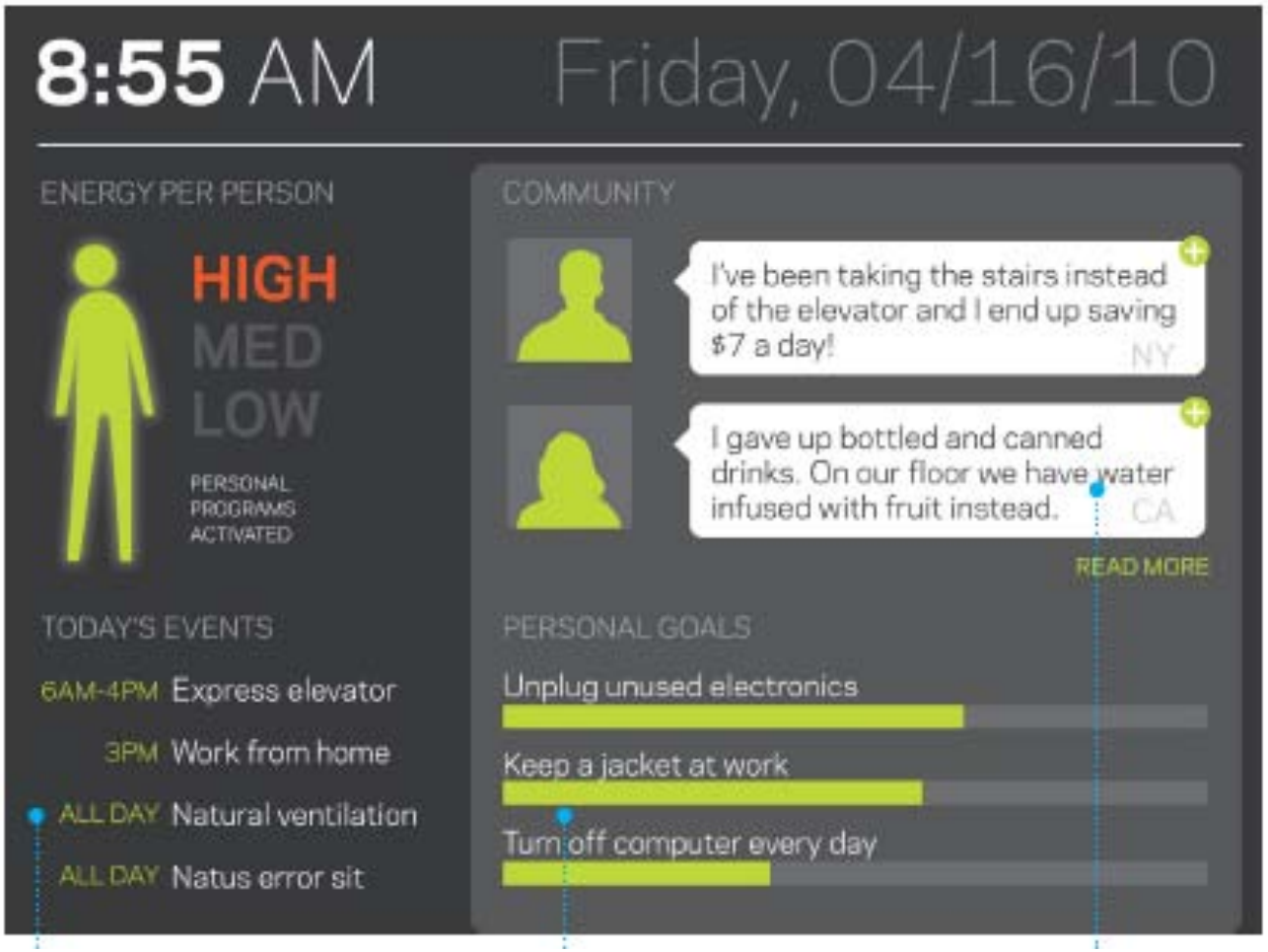
Create a conversation

- Help me connect the dots
- Remind me why I care (Motivation)
- Remind me what to do (Trigger)
- Make it easy (Ability)
- Make me accountable
- Reward me

Show me what I need to know

IDEO desktop display concept for GSA GREENPRINT

Show me … help me *TRIP* over the information

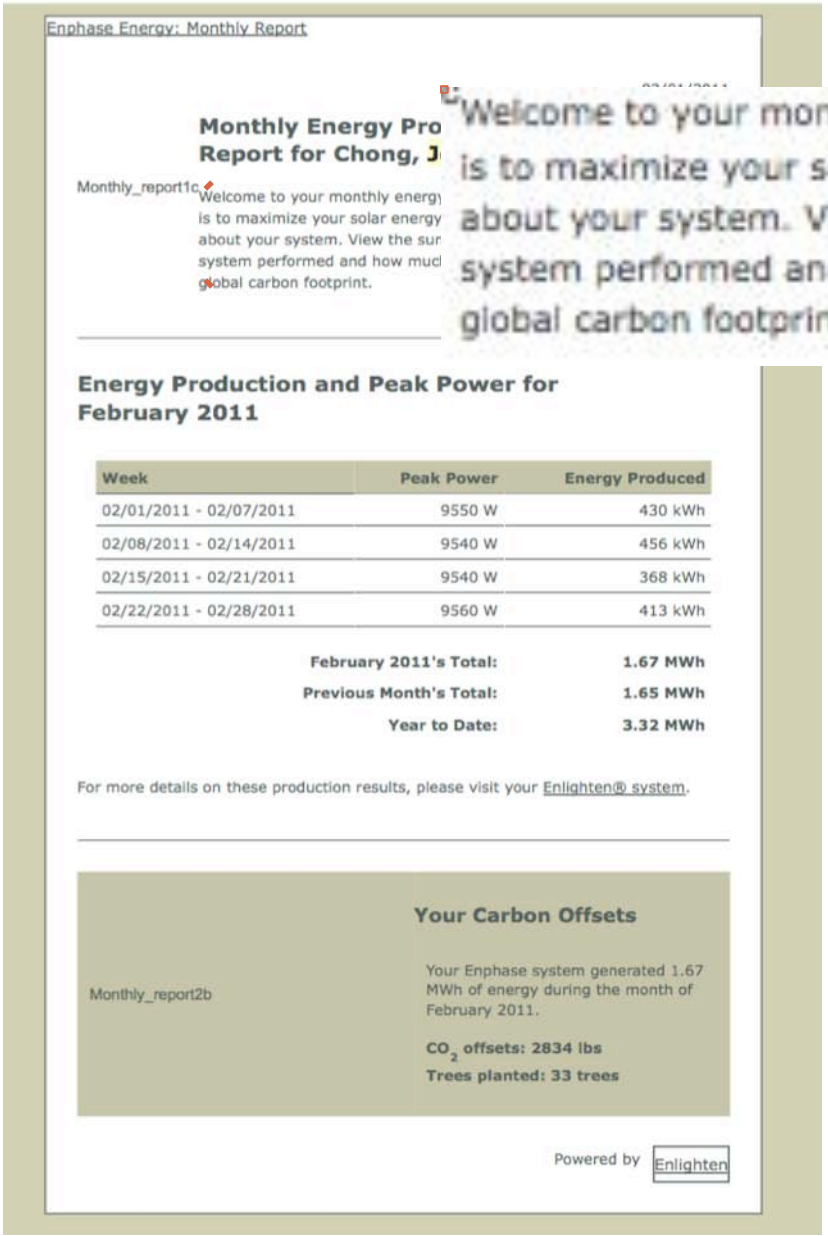


IDEO Elevator display concept for GSA GREENPRINT

Show me … help me *TRIP* over the information

Push Alerts

Show me what I need to know… in a way that is meaningful to me



Enphase Energy: Monthly Report

Monthly Energy Pro
Report for Chong, J

Monthly_report1c

Welcome to your monthly energy
is to maximize your solar energy
about your system. View the sur
system performed and how muc
global carbon footprint.

Welcome to your monthly energy report. Our goal at Enphase Energy is to maximize your solar energy production, and to keep you informed about your system. View the summaries below to see how your system performed and how much you contributed to offsetting the global carbon footprint.

Energy Production and Peak Power for February 2011

Week	Peak Power	Energy Produced
02/01/2011 - 02/07/2011	9550 W	430 kWh
02/08/2011 - 02/14/2011	9540 W	456 kWh
02/15/2011 - 02/21/2011	9540 W	368 kWh
02/22/2011 - 02/28/2011	9560 W	413 kWh

February 2011's Total: **1.67 MWh**
Previous Month's Total: **1.65 MWh**
Year to Date: **3.32 MWh**

For more details on these production results, please visit your Enlighten® system.

Monthly_report2b

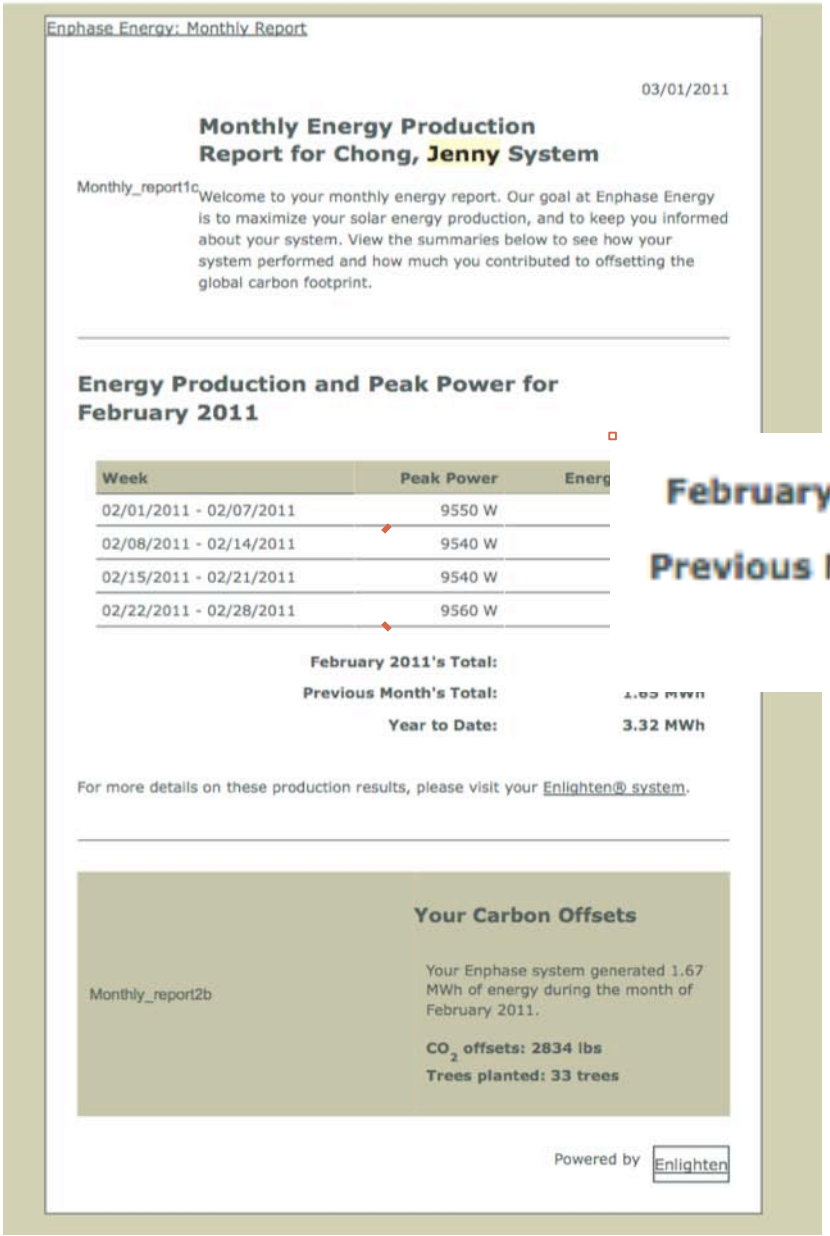
Your Carbon Offsets

Your Enphase system generated 1.67 MWh of energy during the month of February 2011.

CO_2 offsets: 2834 lbs
Trees planted: 33 trees

Powered by Enlighten

Show me what I need to know… in a way that is meaningful to me



Enphase Energy: Monthly Report

03/01/2011

Monthly Energy Production Report for Chong, Jenny System

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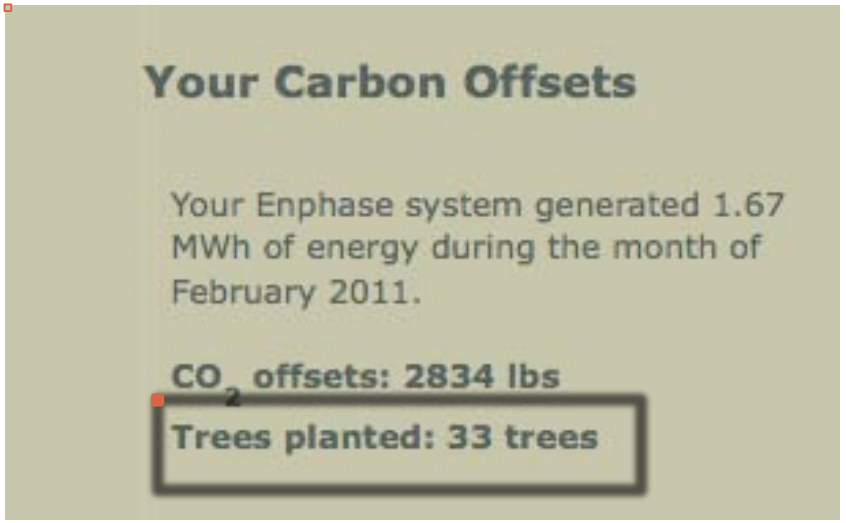


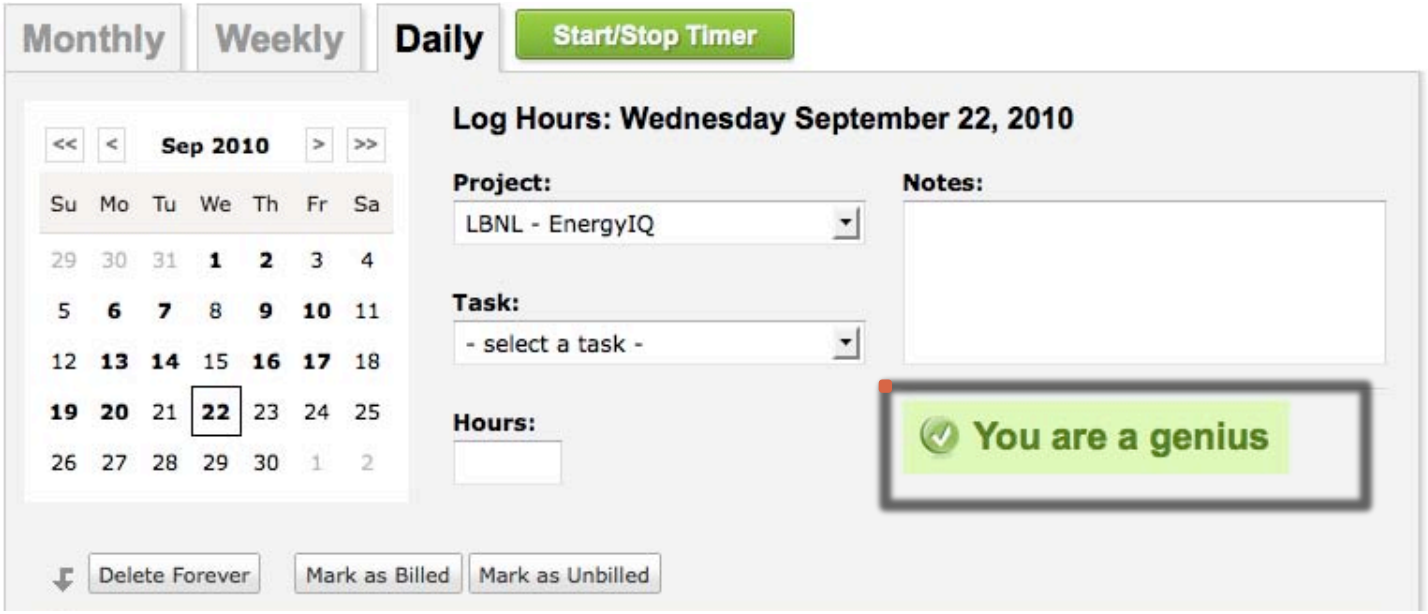
Tell me what to do next ..

Small, visible, incremental steps.

Tell me what to do next ..

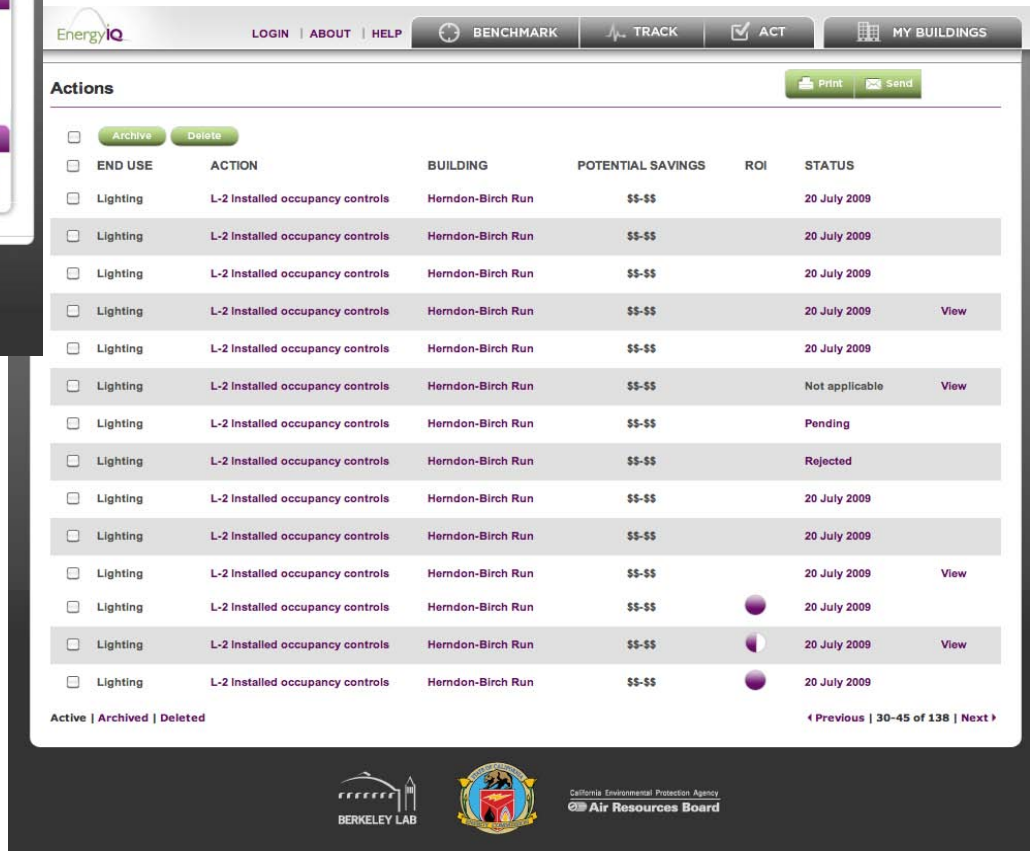
Small, visible, incremental reinforcement

Reinforce me when I get it right …



Freshbooks

Tell me what to do, next.



Engage me and make me accountable

Information design that changes behavior creates a conversation.

Helps me connect the dots
Reminds me why I care (Motivation)
Reminds me what to do (Trigger)
Makes it easy (Ability)
Makes me accountable
Rewards me