



Thanks for taking the time to learn how we can work together to save energy in our business.

This presentation was created by Energy Trust of Oregon to help us think about how we use energy and steps we can take to use less of it.

It's a great place to start a conversation about changes we can make to save energy at (company name).

Because the bottom line is: If we save it, we don't have to pay for it, **and utilities don't have to generate it or purchase it.**

# Energy gives us the power

Learning to see how we use energy can help us see where it's being wasted—and what it costs to let it go to waste.

## Energy at our fingertips



Energy is at our fingertips when we:

- Flip on a light switch
- Power up a computer
- Adjust the thermostat
- Turn on a printer

Many times throughout the day, electricity and natural gas make it possible to do the things we need to do.

In a typical business, up to 30 percent of energy is wasted.



But the truth is, much of the energy we use is wasted – as much as 30 percent in a typical business, according to the U.S. Department of Energy.

It's like an invisible stream of money, flying out the window. Because we can't see it, we often don't realize it's happening.

Kilowatt hours = electricity	Therms = natural gas
<ul style="list-style-type: none"><li>✓ Lighting</li><li>✓ Cooling</li><li>✓ Computers</li><li>✓ Office equipment</li></ul>	<ul style="list-style-type: none"><li>✓ Space heating*</li><li>✓ Water heating*</li></ul>
<small>* Some businesses use electricity for space heating and water heating</small>	

Just like we pay for each gallon of gas we use to fuel our cars, we pay for each kilowatt hour of electricity and each therm of natural gas we use to power, heat and cool our business.

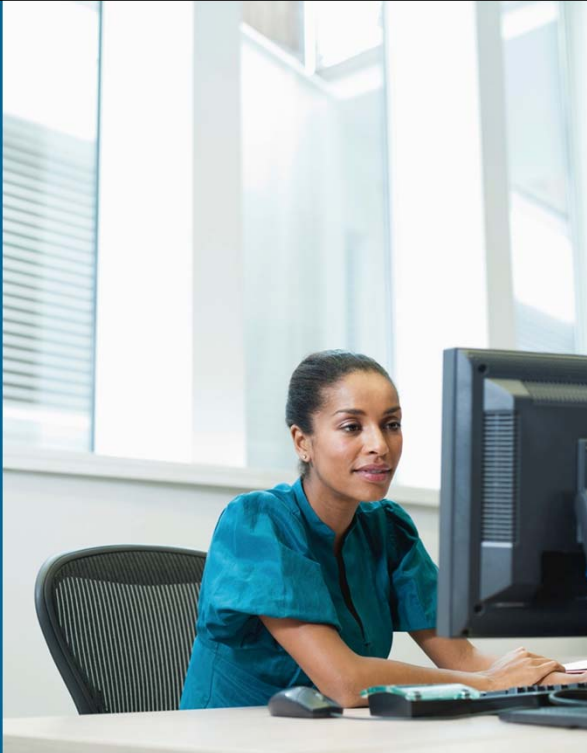
The kilowatt hours we use to light the building, cool our spaces and power our computers and other equipment show up on our electric bill every month.

And the therms we use for space heating and water heating appear on our monthly gas bill.  
(NOTE: Omit or adjust this, depending on how or if you use natural gas.)

Turn it off!

2 hours/day  
x 5 days/week  
x 50 weeks  
= \$8 saved/year

Every hour matters  
and each of us  
makes a difference



For example, it takes about 435 kilowatt hours of electricity to power a computer for 8 hours a day, 5 days a week for 50 weeks. That adds up to more than \$33 worth of electricity.

Turning that same computer off for 2 hours a day could save about **\$8 a year**.

It doesn't sound like much, but multiplied by **X employees**, that one change could reduce our annual operating costs by **\$X**. (NOTE: Insert number of employees in your company and multiply by \$8 to estimate total savings.)

## Business benefits of saving energy

- Reduces operating costs
- Strengthens competitive advantage
- Frees up resources to invest in our business and our employees

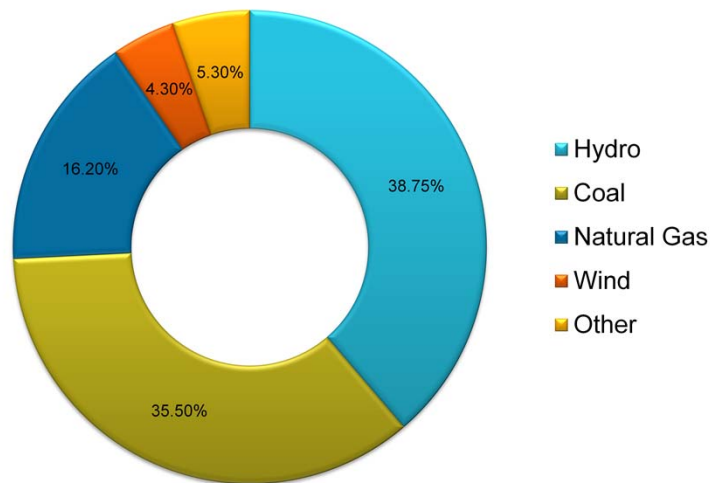


With lower costs, we can be more competitive. And we can invest more in our business and our employees.

### OPTIONAL:

For example, if we could reduce our energy use by just 10 percent, we could free up enough resources to... (insert examples, such as upgrade X computers).

## Electricity generation in Oregon



Saving energy affects more than our bottom line. It also helps us reduce our environmental impact and operate more sustainably.

Here in Oregon, electric utilities generate electricity from a mix of fuel sources. While some sources are cleaner than others, all have an impact on the environment.

This graphic shows how utilities generate the electricity Oregonians use across the state.\*

\*Source: Oregon Department of Energy

[http://www.oregon.gov/energy/pages/oregons\\_electric\\_power\\_mix.aspx](http://www.oregon.gov/energy/pages/oregons_electric_power_mix.aspx)



## Environmental & health benefits of saving energy


- Conserves natural resources
- Reduces air pollution
- Limits carbon dioxide emissions



What are the impacts?

Burning fossil fuels to generate electricity or provide heat and hot water, consumes natural resources and creates air pollution and carbon dioxide emissions.

Electricity generated from hydro power, wind and solar is much cleaner. But no matter where our energy comes from, using less reduces our impact.



The diagram shows a grid of 20 house icons arranged in 4 rows and 5 columns. The first three columns contain yellow house icons, while the fourth column contains red house icons. A wavy line of red dots starts at the top left, passes through the yellow houses in the first three columns, and ends at the bottom right. A second wavy line of grey dots starts at the top left, passes through the red houses in the fourth column, and ends at the bottom right. This visualizes the concept of an 'efficiency power plant' where energy savings from many small users are aggregated.

### Efficiency power plant

- A virtual power plant that runs on efficiency
- Lowest cost source of energy
- Keeps energy costs as low as possible

There's another big benefit to using energy more efficiently.

By saving energy, we are creating a virtual power plant that run on efficiency and helps Oregon meet its energy needs at a fraction of the cost of traditional energy sources.

The less energy we use, the less utilities have to invest in generating, purchasing and distributing power.

That helps keep energy costs as low as possible, and helps us save money in our businesses and at home.

## How can we use less?

There are compelling reasons to use less energy. But how can we make changes to stop wasting and start saving?

## Commercial energy use



Heating, cooling and ventilation (37%)



Lighting: interior & exterior (38%)



Electronics, equipment, etc. (17%)



Water heating (8%)

Let's start by looking at where we use energy.

In a typical commercial building, the biggest energy users are:

Space heating, cooling and ventilation

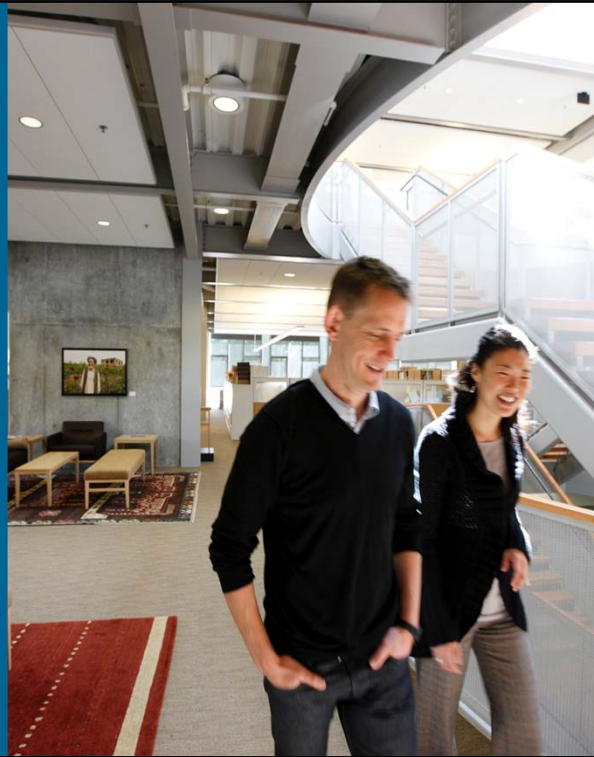
Lighting

Electronics, computers and other equipment

Water heating

## Where's the waste?

- Lighting
- Heating, cooling and ventilation
- Electronics and equipment



As you might expect, the areas that use the most energy are also the places where we can save the most.

In work places like ours, energy can slip away in a number of ways—including through inefficient lighting and outdated heating and cooling equipment.

That's why our company is making/has made improvements to become more energy efficient. (Narrator can provide examples.)

# YOU have the power to save energy

Each of us can make a big difference by taking simple steps to save.

Multiply individual actions by everyone who works here, and we can reduce the power our company uses by as much as 10 percent.

That's a BIG difference from small changes.



You can do your part with simple changes and a few new habits like these:

- Turn off computers and monitors when not in use.
- Start by turning off your monitor when you go to lunch or if you'll be away at a meeting for an hour or more.
- And always remember to turn off your computer at the end of the workday and over the weekend.

There's a common myth that turning computers and monitors off and on causes them to wear out more quickly and uses more energy than leaving them on. With today's equipment, it's simply not true. To save the most, turn them off.

Check with your IT department to make sure turning off your computer will not interfere with evening or weekend upgrades or maintenance.

Skip the  
screen saver

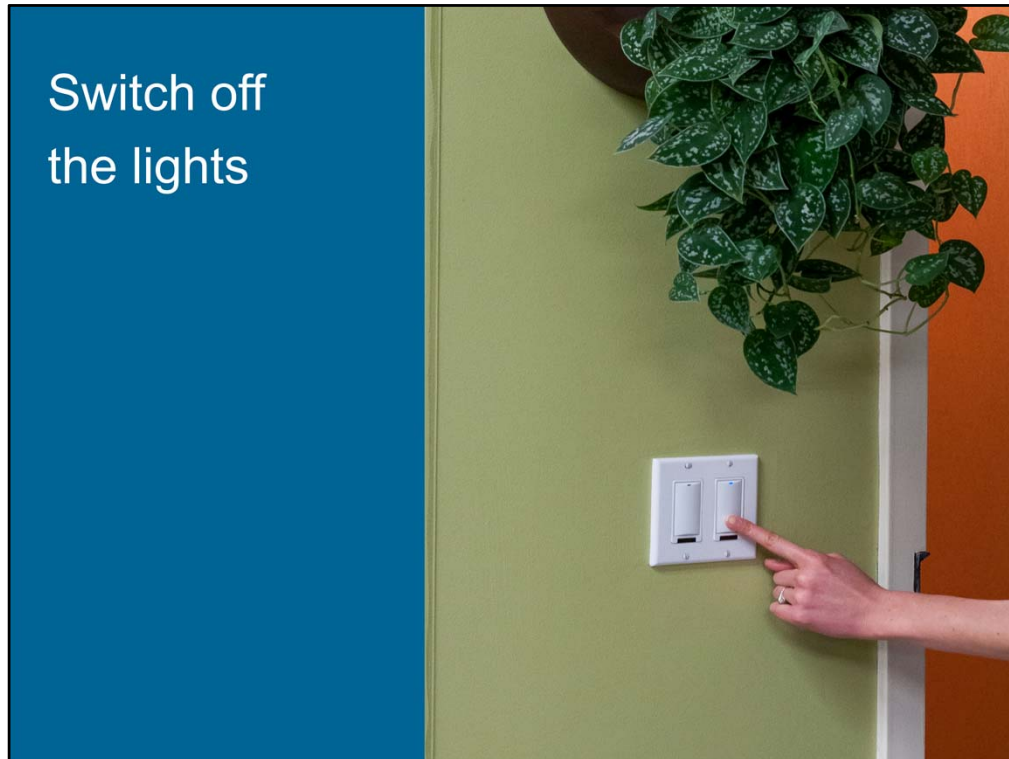


Skip the screen saver. Screen savers keep your monitor active and use energy.

Instead, set your computer to automatically go into power saving mode when you're not using it.

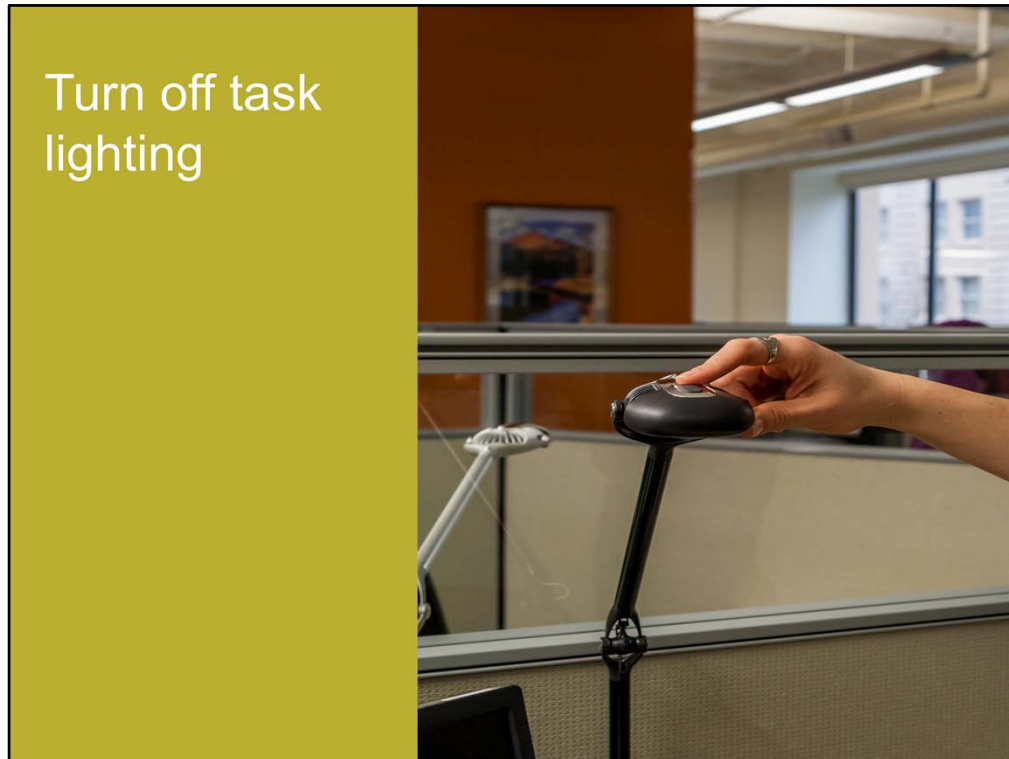
A dark monitor shows you're a smart energy user.





Switch off the lights when you leave a room.

Get in the habit of turning off the lights when you leave conference rooms, restrooms and other spaces around the building.



Turn off task  
lighting

Turn off task lighting at your desk.

Switch off any desk or floor lamps when you leave your workspace for more than a few minutes.

And make sure you're using energy-saving compact fluorescent or LED light bulbs.

(NOTE TO PRESENTER: Share information about who employees should contact for energy-saving light bulbs.)

## Unplug devices and chargers



Unplug devices that aren't in use.

Battery chargers and power adapters can draw power even when charging is complete, and any equipment with a light that stays lit is using electricity.

If you use a desk fan, unplug it when you leave for the day.

Don't change  
thermostat  
settings



Don't change thermostat settings.

If the thermostats aren't locked, resist the temptation to change the settings. The heating and cooling settings have been programmed to use energy most efficiently and turn off when the building is empty.

## Use a power strip at your desk



Use a power strip at your desk.

Computers and electronics often draw power even when they're turned off. Plug them into a power strip, then turn it off at the end of the day to completely disconnect the power supply.

Place the power strip in an easy-to-reach place, so it's convenient to use.

## Stop using space heaters



Space heaters use a lot of energy and can cause the building's heating system to operate inefficiently.

If your space isn't comfortable, talk with the office manager about solutions.

## Turn off equipment



Turn off equipment at the end of the day.

Shared equipment like copiers, printers and coffee makers can draw a lot of power if left on at night, on weekends and over holidays.

Make sure they're turned off after hours and that someone turns them back on at the start of the workday.



Keep heating  
and cooling  
vents free of  
clutter



Make sure heating and cooling vents aren't blocked so air can circulate freely.

If they're obstructed, the HVAC system can't operate efficiently.



Go paperless



Before you hit the print or copy button, ask yourself if you really need paper copies.

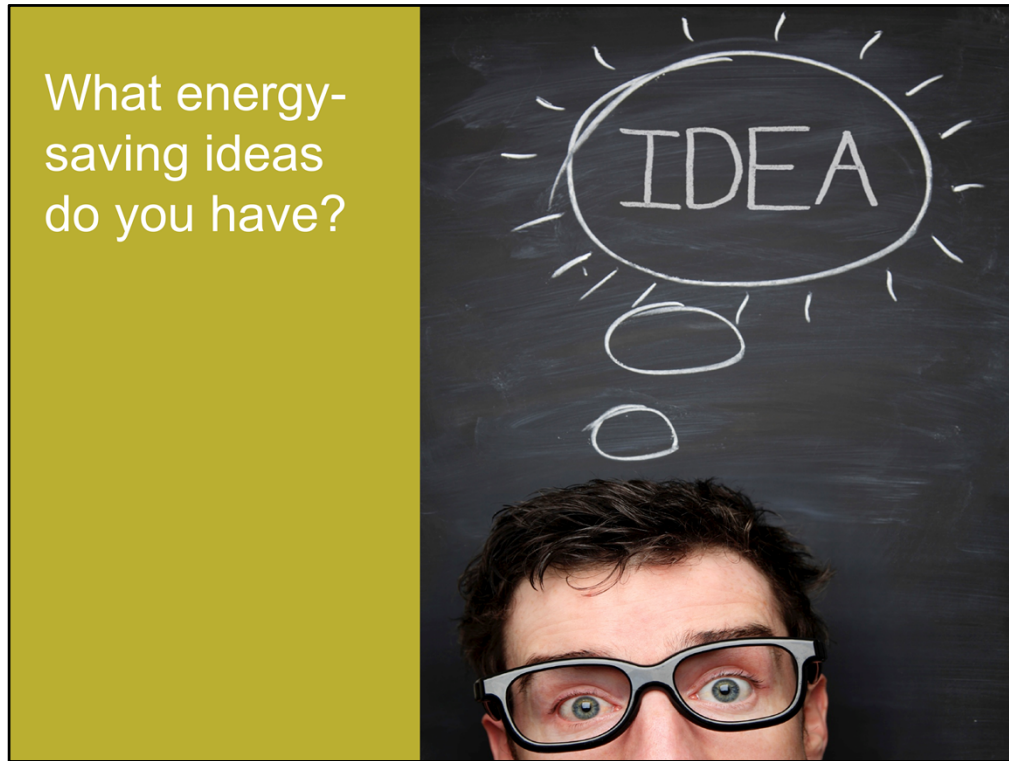
Every sheet you print uses energy.

Close window  
shades on hot  
days




Close the shades to keep the summer heat outside.

Heat coming through the windows makes the air conditioning system work harder.



Opportunity for discussion with this slide



So what's in it  
for all of us?

Taking steps to save energy is easy if you take the time to create new habits.

Before you know it, you're making a big difference.

## Business benefits



Your efforts can:

- Free up resources to invest in the business and our employees
- Help our company stay competitive and grow
- Reduce our operating costs as much as 10 percent
- Support our sustainability goals
- Improve efficiency

## Personal rewards



At the same time, you can:

- Do your part for Oregon and the environment
- Conserve natural resources
- Lead by example
- Make a difference through public stewardship
- Build a better future for our community

## Want to do even more?

- Join or start a green team at our company
- Get creative about new ways to save
- Track down and save wasted energy at home. Energy Trust can help.



Thanks for all you do to make our company a great place to work.

I'm excited to see how we can make a difference by working together to save energy.

