The Future of Plumbing

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Green Plumbers USA
The Future of Plumbing

Presentation Agenda:

The Traditional Role Of Plumbers In Water/Energy Relationships
- Plumbers as Part of the Conservation Solution?
  I. Genesis of GreenPlumbers
  II. Educational Partnerships
  III. GreenPlumbers Goals for 2008
IV. Proven Results in Water and Energy Conservation
  V. Barriers to Success
  VI. Conclusion

The Traditional Role Of Plumbers In Water/Energy Relationships

INEFFECTIVE
The Traditional Role Of Plumbers In Water/Energy Relationships

- Plumbers are generally conservative
- Don't relate to “Global Warming”
- Hate Low Flow or ULF Toilets

Relating to Water Conservation…
Plumbers are part of the problem

Water Districts Seeking Plumbing Industry Assistance In Water Conservation Efforts

– generally receive no response –

And…
AB 2496 in 2006 –

CALIFORNIA REGULAR SESSION

ASSEMBLY BILL No. 2496

Introduced by Assembly Member Leno

February 1, 2006

An act to amend Section 17921.3 of the Health and Safety Code, relating to water conservation.

Resulting in a Veto by Governor Schwarzenegger Sept. 28 2006

Genesis of GreenPlumbers
PLUMBERS IMAGE

How valuable would it be if Plumbers were part of the solution?
Image of Plumbers over time...

Circa 1934

Image of Plumbers over time...

These Days...
Image of Plumbers over time…

These Days…
Definition of “Plumbers Butt” in the Urban Dictionary:
1. When a Man bends over and his butt crack hangs out

Complete Culture Change is not an option – it’s a necessity

PLUMBING AS A CAREER

How valuable would it be if Plumbers were part of the solution?
Data from the National Employment Matrix

<table>
<thead>
<tr>
<th>Occupation (SOC code)</th>
<th>Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plumbers, Pipefitters, and Steamfitters(472152)</td>
<td>435,960</td>
</tr>
<tr>
<td>Heating, Air Conditioning, and Refrigeration Mechanics and Installers(499021)</td>
<td>250,970</td>
</tr>
<tr>
<td>Electricians(472111)</td>
<td>647,370</td>
</tr>
<tr>
<td>Pipelayers(472151)</td>
<td>58,330</td>
</tr>
</tbody>
</table>

Plumbers and Pipelayers Combined:
Current Employment = 494,290
Projected Employment by 2016 = 628,000


CHAMPIONS OF CONSERVATION

How valuable would it be if Plumbers were part of the solution?
IMAGE

PLUMBING AS A CAREER

CHAMPIONS OF CONSERVATION

How valuable would it be if Plumbers were part of the solution?

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2007 – Introduced AB 715

CALIFORNIA LEGISLATURE—2007–08 REGULAR SESSION

ASSEMBLY BILL No. 715

Intro
(Coauthors: Asey, aird
nan, Mulin, and

An act to amend, renumber, and add Section 17921.5 of, to add and
repeal Section 17921.4 of, and to repeal and add Section 17921.3 of,
the Health and Safety Code, relating to water conservation appliances.

Became Law – January 1, 2008
This was the first indication of how different the plumbing industry would be if we took on the role of being champions of the environment.

The GreenPlumbers® program was developed by the Master Plumbers & Mechanical Services Association of Australia (MPMSAA) from an initial project in 2000/01 "The plumber household interface in appliance purchase decisions". This project involved a number of partners such as local council and manufacturers, and had significant financial sponsorship from within the plumbing industry (including manufacturers) and the Australian Greenhouse Office (AGO). Since then a series of training and accreditation programs have been developed by MPMSAA to enhance plumbers skills and knowledge about the environmental considerations of their work - the new generation of plumber - the GreenPlumber®.
A series of workshops have been designed to enhance plumbers' skills and knowledge about the environmental considerations of their work. These training opportunities place plumbers in a better position to advise and inform consumers on topics such as: the benefits of energy efficiency; water conservation or the most appropriate and cost-effective appliances to suit individual needs.

Accredited GreenPlumbers® in Australia

To date there are more than 5,000 plumbers representing over 2,400 plumbing businesses that have completed one or more GreenPlumbers training sessions.

In some states, water levels have been reduced up to 50% since 2001
TRAINING PROGRAMS

GreenPlumbers® training programs are designed to assist plumbers in understanding their role in relation to Environmental & Public Health, and to provide their customers with up to date information and advise on:

- latest technology and energy saving appliances
- practical appliances & installation knowledge
- environmental impacts of plumbing services, appliances and household practices
- consumer information
- energy/water/cost savings (short term and long term cost comparisons and environmental benefits)

GreenPlumbers® Training and Accreditation Program

GreenPlumbers Environmental Solutions
5 course / 32 hours

- Climate Care
- Caring for our Water
- Solar Hot Water
- Water Efficient Technology
- Inspection Reports
**GreenPlumbers® Accreditation Program**

**Climate Care**
- Hot Water Heating
- Energy Consumption
- Heating Appliances
- Cooling Appliances
- Greenhouse Gas Abatement

**Caring For Our Water**
- Water Efficient Products
- New Technology
- Household Water Audits
- Reducing Household Water Consumption
- Stormwater
- Sewage

**GreenPlumbers® Accreditation Program**

**Solar Hot Water**
- Solar Hot Water Technology
- State Rebate Information
- Sizing and Installation Requirements
- Retro Fitting
- New Technology

**Water Efficient Technology**
- Reuse/Recycled Water
- Rainwater
- Greywater
- Septic Tanks and Aerated Wastewater Treatment Systems
- Environmental and public health and safety regulations
**GreenPlumbers® Accreditation Program**

**Inspection Report Service**
- Water and Energy Audits
- Commercial / Industrial and Residential Buildings
- Creating a Master Plan for Future Improvements

**Benefits of GreenPlumbers® Accreditation**

**Training & Accreditation**

GreenPlumbers® seeks to provide environmental training for existing journey level plumbers on a no-fee basis, with program funding supplied through government, agency, utility and manufacturer partnerships.

- Attain additional skill and knowledge levels
- Enhance your public image and become the expert on new products and technologies
- Increase value to your employer
- Provide beneficial results for society and the planet

What effect will *Climate Change* have on your business in 2008? Are your plumbers prepared to discuss water and energy conservation in an enlightened marketplace?

A recent survey revealed that only 11% of Americans consider themselves to be extremely “green” today, but 43% believe they will be extremely green within five years!
Article written by Steve Lehtonen in Fall 2006 after his meeting in Australia with Green Plumbers.

The future is Green Plumbing

Industry Overview

A

rticle is approximately one page long. The content of the article is not visible in the image.
California PHCC Signs Pact - Australia's Green Plumbers

California's Plumbing, Heating, Cooling Contractors (CPHCC) has just concluded negotiations allowing the association to share the environmentally successful (and often) Green Plumbing programs of Australia's PHCC.

Green Plumbing is a national ranking and accreditation program developed in 1999 by the Mechanical Contractors Association of Canada to identify plumbers, in understanding their role in the environmental scene.

Originally a federally funded initiative for reducing greenhouse gas emissions in heating, cooling, and water services, the program has now been expanded to include:

- water conservation,
- location in geographic area and economic,
- alternative energy sources for hot water heating,
- alternative water services, and
- residential and commercial buildings with no water use.

The program and the emerging technological base has been a major catalyst for change in plumbing regulations and policies across the U.S., bringing many states into compliance. Major industry leaders in Australia have already supported the program and committed to thousands of dollars in support for further research and development.

The plan utilizes an ongoing interest in environmental programs both at the state and national levels, and the ability to utilize technology to reduce costs and increase efficiency.

Karen Wallis, CPHCC President, said, "We are pleased to see such a strong interest in the program and hope that it will continue to grow as we work together to reduce our impact on the environment."
GreenPlumber of the Year meets former USA Vice President Al Gore
Schwarzenegger Addresses U.N. on Climate Change
September 24, 2007
GreenPlumbersUSA

Educational Partnerships

www.greenplumbersusa.com
GreenPlumbers®, Water Agencies, and Utilities:

A Natural Partnership to Conserve Water and Reduce Green House Gas Emissions

Workshops with Water Agencies, Utilities, and Manufacturers

The potential with 15,000 plumbers trained is to enter 50,000+ houses per day. Ability to track with a simple water audit of each house visited = statistics on individual homes and water usage.

Harking back to the Australian Government plan:

Our plan is to *influence the purchasing decision of householders* by presenting them with positive reinforcement of their commitment level to water conservation and reducing GHG emissions.
Survey of Plumbing Contractors = 2.8 calls per day

If GreenPlumbers® trains 1,500 Plumbers in Northern California

x 2.8 calls per day =

GreenPlumbers® in 4,200 houses a day =

84,000 houses per month =

1,008,000 houses per year.

If the Plumber is able to save just 20 gallons of water per house per day the savings over the course of a year will be:

7,358,400,000 gallons of water saved per year.

GreenPlumbersUSA

Goals for 2008
GreenPlumbersUSA

Workshops began September 2007

To date:

22 workshops

337 plumbers trained

www.greenplumbersusa.com

GreenPlumbersUSA

We are continuing to train throughout California

Workshops are scheduled in Texas, Florida and Wisconsin

and soon in

Atlanta, New York, New Jersey, Nevada, North Carolina

www.greenplumbersusa.com
GreenPlumbersUSA

Metro – City Challenge

5 full classes in Las Vegas – October 2008

GreenPlumbersUSA GOAL:
To Retrain 15,000 plumbers in California
and 40,000 in the United States

SCOPE:
55,000 Plumbers = 2,750 Workshops across the Country
As GreenPlumbers Gains Widespread Recognition
We Will Yield Tremendous Benefits

-To the Consumer
-To the Industry
- To Society
How’s your footprint?
With GreenPlumbers,
you can help
your clients’ footprint
get smaller.

GreenPlumbers®, the acclaimed program from Australia, has hit the U.S.!
GreenPlumbers has developed a four-part accreditation and training
program that includes training in climate care, caring for water, solar
technology, water conservation and recycling, and water-efficient
technology. In the last six months, GreenPlumbers has trained more
than 100 plumbers. Our mission is to offer training to all recognized
plumbers and plumbing contractors on a no-fee basis.

To register a workshop in your area, or to learn more about
sponsorship opportunities, visit www.greenplumbersusa.com.

in partnership with:

American Standard

www.greenplumbersusa.com
An Army of GreenPlumbers across the country…

- IMPACT CONSUMERS
- ACHIEVE PROVEN RESULTS

Behavioral Change Comes Through Knowledge And Commitment

Conservation Strategies

Product v. Behavioral

2007 Water Conservation Master Plan

Technical (90%) - efficient plumbing fixtures
Behavioral (10%) – shorter showers, reduced irrigation
Getting the Word Out to Consumers

Ultimate Mission For GreenPlumbers In Conjunction With Our Partners:

PROVEN WATER AND ENERGY CONSERVATION RESULTS
- through product installation and sustained behavioral change

Through Partnerships We Can Place Tools In the Hands Of The Consumers That Will Bring About

- Behavioral change in concert with product installations

- Tools visible on a daily basis as regular as the gas gauge in your car
Plumbers are everywhere….

- Have Face to Face contact with homeowners and businesses
- Delivering the consolidated GreenPlumbers message to consumers across the country

The Future of Plumbing

Each and every certified GreenPlumber® can have an immediate impact on water conservation and energy reduction by becoming educated on new products and technologies

Have the ability to effectively influence the purchasing decision of householders by being the face to face contact within residences across the nation

Re-instill the image of the plumber as vital to the health and well being of the country and protecting the resources of the planet
Conclusion

When consumers begin to see that their quality of life can be just as good as it is now, while saving considerable amounts of water and energy.

Our goal is to be ONE of the conduits that enables consumers across the states to do it. We are in a unique position because we can link between the water districts and utilities efforts that spider web across the country.

As a sole purpose organization, GreenPlumbers can be the champions of water and energy conservation.

My goal today is for you to leave here thinking of ways that you can help publicize the mission of GreenPlumbers.

www.greenplumbersusa.com
To get involved, contact us at:

888-929-6207

or

www.greenplumbersusa.com