

enervee

watts in your wallet

SAVING \$46 BILLION* FOR HOME APPLIANCE SHOPPERS

Enervee brings a new approach to online shopping that enables consumers, businesses and governments to buy products based on the personal cost of owning things rather than just the purchase price.

THE TEAM

- **Matthias Kurwig, Product**

Cofounder and CEO, environmental realist from Europe, audience builder & monetizer, user experience addict, successful entrepreneur



- **Alex Katzman, Business Development**

Smart grid pro with an MBA in renewable energy, global experience in UK, Argentina and South Korea



- **Don Epperson, Marketing**

Cofounder and Chairman, environmental realist, data nut, global business builder, successful entrepreneur



- **David Hankinson, Technology**

Hardcore backend engineer, python/django native, 20yrs experience in scalability



- **Guy Champniss, Keeping us honest**

With Enervee since the early hours, sustainability and pro-social behavior consultant, working with global brands, book author



THE PROBLEM - COMPARING PRODUCTS' ENERGY COST

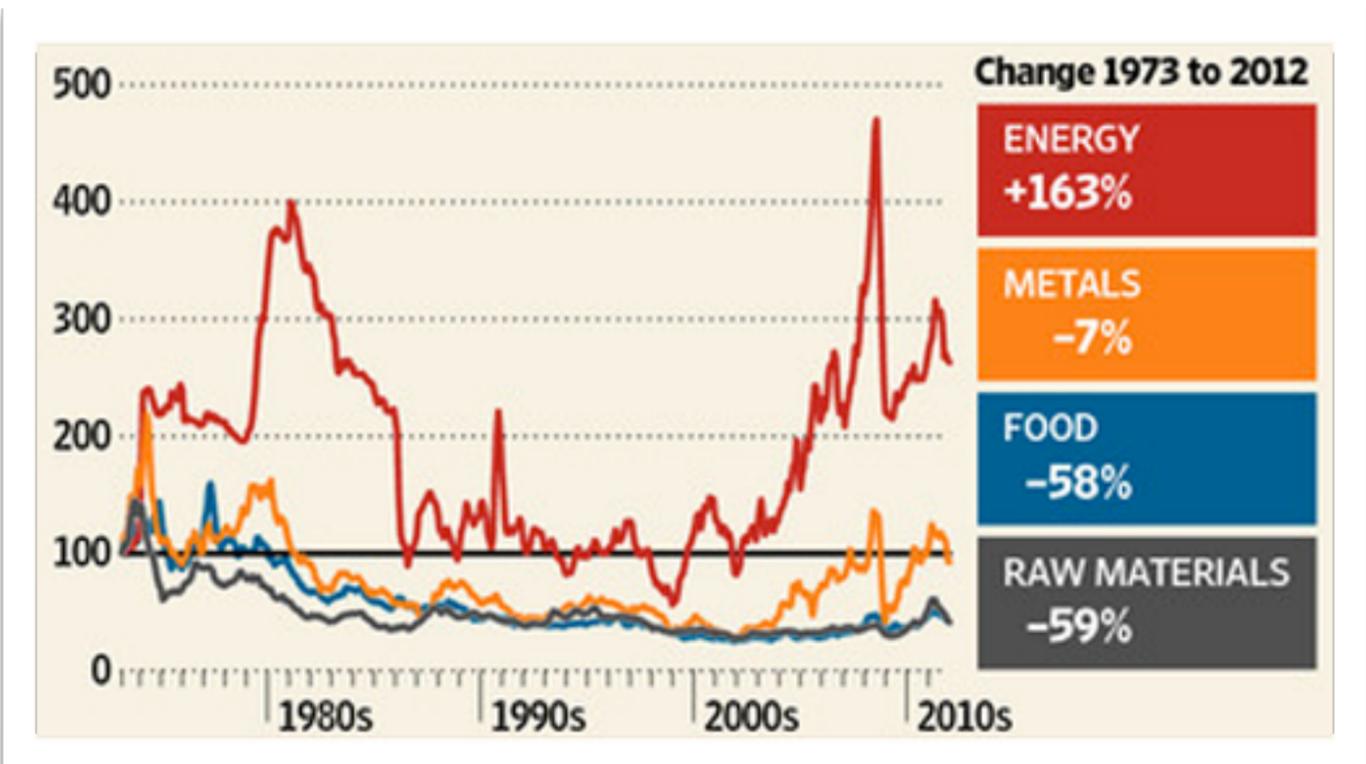
- Comparing products based on energy consumption and cost is complex and difficult to do
- Purchase price does not capture the true cost of ownership for appliances
- A products' energy use differs greatly per user, based on locality and usage behavior
- Showing personal energy cost requires integrating no less than 18 diverse data sources



THE DEMAND - ENERGY USE AND COST ARE SOARING

- 60%* of Americans think their utility bills have increased
- 53%* would choose to make their homes more energy efficient rather than more comfortable or more beautiful
- 26 million users use “green sites” per month
- 80+ million US users use shopping comparison sites

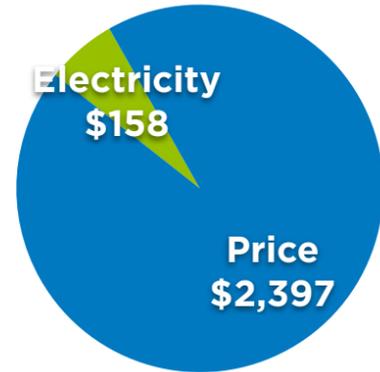
Adjusted for inflation, energy prices are now well above 1973 levels. Food and raw materials cost far less.



Note: Indices are trade-weighted US dollar prices deflated by change in US consumer price index. Source: IMF World Economic Outlook and The Wall Street Journal

THE DECISIONS - DIFFERENCES IN COST ARE SIGNIFICANT

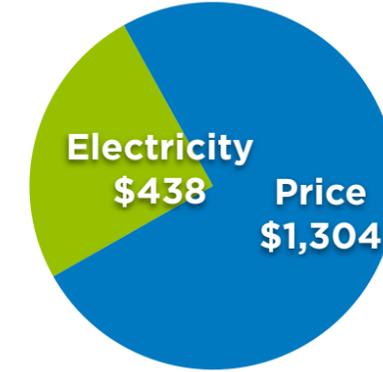
Samsung UN55D8000YF 55" 3D LCD TV **e-cost: \$158**



VS

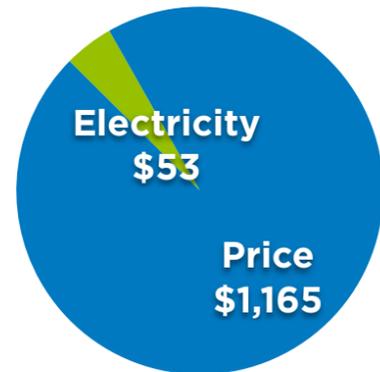
Vizio XVT553SV 55" LCD TV

e-cost: \$438



Apple MacBook Air 13.3 in.

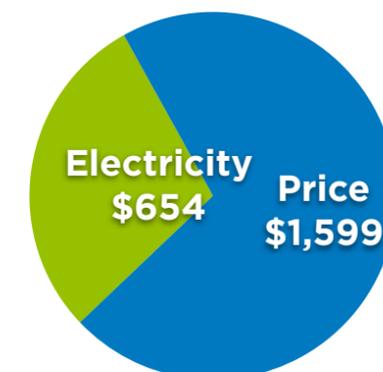
e-cost: \$53



VS

Apple iMac 27 in. Mac Desktop

e-cost: \$654



price comparisons change dramatically

Utility

Utility rates & emissions for zip 10011: Con Edison Co of NY Inc

Select your provider

Home > Den > Televisions

The **Vizio XVT553SV 55" LCD TV** is 47% less energy efficient than the average for TVs

<p>Energy Efficiency:</p> <p>average</p>	<p>5 Year-Electricity Cost</p> <p>\$438.44</p> <p>On for 5 hours per day</p>	<p>Lowest Purchase Price:</p> <p>\$1,318.32</p> <p>Visit store</p>
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VIZIO s XVT553SV 55 TruLED LCD HDTV with VIZIO Internet Apps delivers the ultimate HDTV experience! Packed with the latest technology, this HDTV offers premium picture quality, advanced picture quality, immersive virtual high definition sound and premium... more »

Solution: The Enervee Decision Engine



Let's save more energy and share...

Tweet Pin it +1 Like

Use

Time per day the product is on:

1 5hours 24hours

Show energy cost for:

1 5years 20years

Add to list

The **Vizio XVT553SV 55" LCD TV** produces 1.2 tons of carbon dioxide over 5 years



The equivalent emissions from **44 cylinders** of propane used for home barbeques



The equivalent emissions from **119 gallons** of gasoline consumed

The cost for carbon credits **\$4.94** at today's market price

THE SOLUTION - ENERVEE

- A decision engine showing energy cost and eco impact
- Easy rankings for 20,000+ products in over 30 categories
- Augmenting the shopping process for anything that uses energy to operate
- Personalized, based on a user's utility provider and usage
- Optimized for social sharing
- Website, mobile, freemium API

www.enervee.com

enervee^{beta} Welcome Matthias (logout) Your List Help

find energy efficient products... Search

Popular Searches: Refrigerators, Flat TVs, Mac Laptops, Washing Machines

Save on Kitchen Den Office Computers House & Home Heat & AC Community

Utility rates & emissions for zip 96753: US National Average Select your provider

Home > Den > Televisions

The **Samsung PN58C8000 58" 3D HDTV Plasma TV** is 45% less energy efficient than the average for TVs

Energy Efficiency: average	5 Year-Electricity Cost \$230.94 On for 5 hours per day	Lowest Purchase Price: \$1,982.95 Visit store
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Get a true cinematic experience without going to the cinema with a Samsung plasma HDTV. This Samsung PN58C8000, with Mega Dynamic Contrast Ratio makes sure every frame is saturated with dense, rich color. Samsung is also ENERGY STAR compliant so... [more »](#)

Eco-View Let's save more energy and share... Time per day the product is on: 1 Hours 24hours Show energy cost for: 1 5years 20years Add to list

The **Samsung PN58C8000 58" 3D HDTV Plasma TV** produces 1.4 tons of carbon dioxide over 5 years

The equivalent emissions from 53 cylinders of propane used for home barbeques	The equivalent emissions from 143 gallons of gasoline consumed	The cost for carbon credits \$7.34 at today's market price
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Assumptions: Samsung PN58C8000 58" 3D HDTV Plasma TV uses 383.94 kWh/year, US National Average for zip code 96753 with carbon intensity of 1463.13 (pounds of CO₂ emitted per megawatt-hour of electricity produced), CO₂ equivalencies from epa.gov, today's ICE market price for carbon credits is \$5.23 (updated: Thu, 19 Apr 2012 17:00:02 +0000) USD per short ton of CO₂. enervee.com data from 3/20/2012

Do you have a comment? Our data not perfect? Please give us [Feedback](#) here.

Save at 2 stores with offers for this product

Merchant	Rating	Tax & Shipping	Price
amazon.com Marketplace	✓✓✓✓✓	Tax: Check Site	\$1,982.95 Visit store
Buy.com	✓✓✓✓½	Tax: Check Site	\$2,999.99 Visit store

Shopping results from [Shopping.com](#)

Product detail and features

Product MPN
MPN: PN58C8000

Key Features
Broadcast Format Displayed: 1080p (HDTV) • 1080i (HDTV) • 720p (HDTV) • 480p (EDTV) • 480i (SDTV)
Flat Panel Type: Plasma TV

THE DECISIONS - THEY'RE ACTIONABLE

- Better product comparisons based on purchase price, ongoing cost and eco impact
- Personalized for user-specific product use and utility rates
- Creating a marketplace for products and utility providers
- Proprietary rankings and advanced analytics provide consumer confidence

The screenshot displays the enervee.com website interface. At the top, the logo 'enervee beta' is visible alongside a search bar with the text 'find energy efficient products...' and a 'Search' button. Below the search bar, there are navigation tabs for 'Kitchen', 'Den', 'Office', 'Computers', 'House & Home', and 'Heat & AC', along with a 'Community' link. A green banner indicates 'Utility rates & emissions for zip 96753: US National Average' with a 'Select your provider' button. A form prompts the user to 'Please enter your zip code here: 76537' with an 'Update' button and a link to 'Find 241 more power plans here...'. A table titled 'Choose your electricity provider...' lists options like CPS Energy, Austin Energy (TX), Hawaii State Average, and US National Average, with columns for 'Renewable' and 'Rate'. Below this, a section for 'Look for energy efficient Fridges' provides a breakdown of electricity costs: highest at \$894, average at \$571, and lowest at \$126. A pie chart shows that 45% of fridges are above average and 55% are below average. The main product list is sorted by 'Energy Efficiency' and includes items like 'Frigidaire FGUN2642LF (26.6 cu. ft.) Bottom Freezer French ...' with a lowest purchase price of \$1,546.14 and an electricity cost of \$507.67. Other products shown include Electrolux EI27BS16JS, Frigidaire FGUN2642LE, Frigidaire FGUN2642LP, and Samsung RFG293HABP.

THE DECISIONS - THEY'RE PERSONAL AND LOCAL

- Enervee covers over 3,000 electricity providers with rates varying by more than 500%
- In deregulated states Enervee promotes comparisons of hundreds of electricity plans
- Category-specific product-use is saved per user: *“How many hours is your TV running per day?”*
- Enervee also accounts for standby power per category

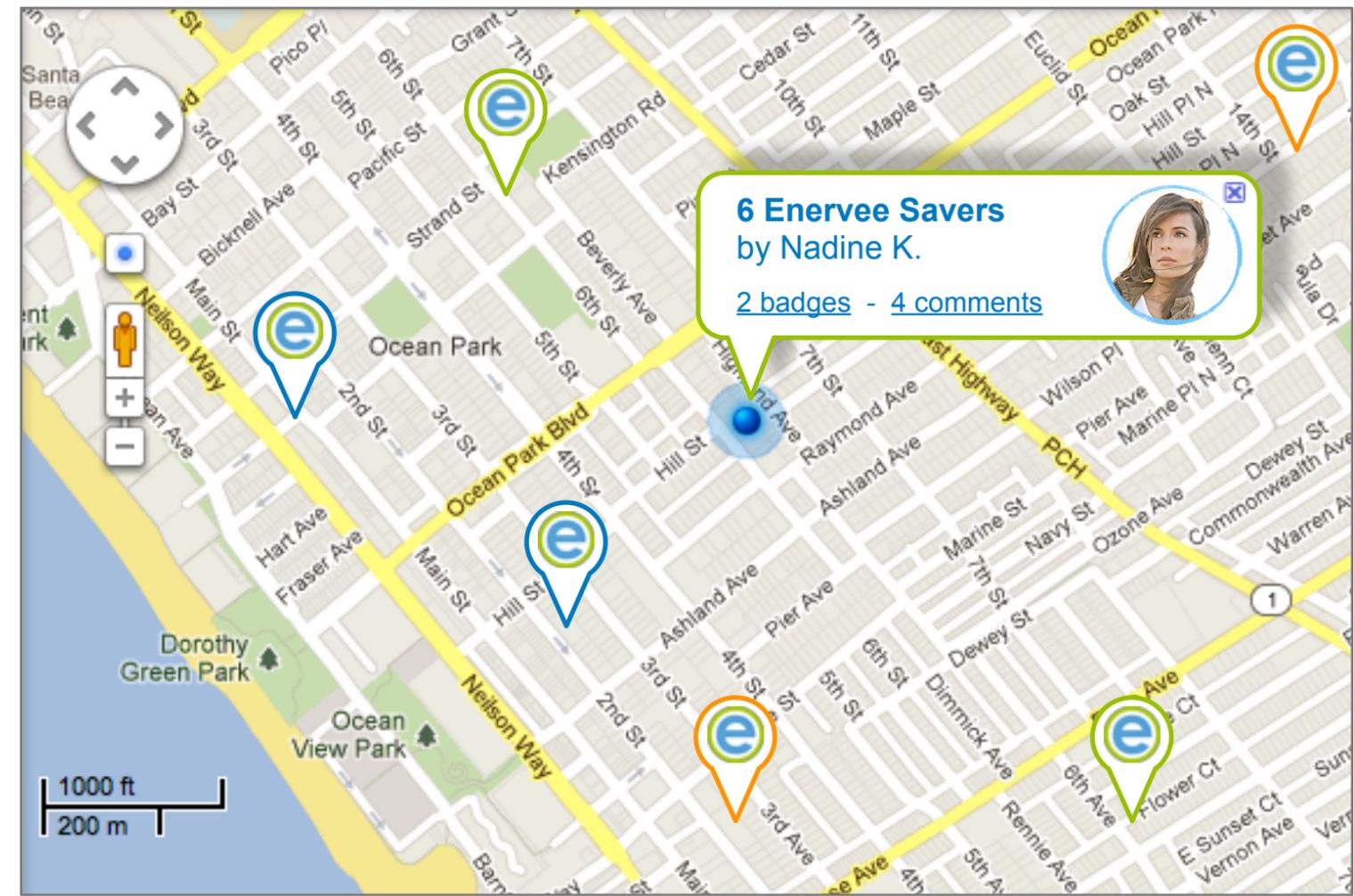
www.enervee.com

The screenshot displays the Enervee website interface. At the top, there's a search bar with the text "find energy efficient products..." and a "Search" button. Below the search bar, there are navigation tabs for "Kitchen", "Den", "Office", "Computers", "House & Home", "Heat & AC", and "Community". The main content area is titled "Utility rates & emissions for zip 76537: US National Average". It includes a form to enter a zip code (76537) and an "Update" button. Below this, there's a table of electricity plans with columns for "filter by" (Rate, Renewable, Term) and "sort by" (Type, %Renewable, Rate). The table lists several plans, including "Mission Power Online Fixed 6", "Dynowatt 12 Month SecureRate Online Fixed Price Plan", and "Southwest Power & Light Renewable Healthy Heart Of Texas Fixed 3 Month R...". Below the table, there's a section for "Choose your electricity provider..." with radio buttons for "CPS Energy", "Austin Energy (TX)", "Texas State Average", and "US National Average". The "US National Average" option is selected. To the right of this section, there's a table with columns for "Renewable" and "Rate". Below this, there's a product page for a "Frigidaire FGUN2642LF (26.6 cu. ft.) Bottom Freezer French Door Refrigerator". The product page includes a description, a "1 Year-Electricity Cost" of \$50.77, and a "Lowest Purchase Price" of \$1,546.14. There's also a "Visit store" button and a "Add to list" button. At the bottom, there's a social sharing section with "Tweet", "Pin it", "+1", and "Like" buttons, and a "Show energy cost for:" section with a slider for "1 years" and "20 years".

Do you have a comment? Our data not perfect? Please give us [Feedback](#) here.

THE DECISIONS - THEY'RE SOCIAL

- Enervee makes social sharing of products and savings easy
- Cost and eco-impact can be shared per product, per category or for user specific shopping lists
- Using proprietary rankings products are compared to category averages
- Future features include local peer comparisons and bringing energy use to social game worlds



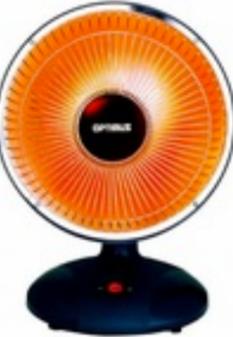
Matthias Kurwig liked a link.
4 minutes ago



Energy Cost for Optimus H-4110 Electric Air Heater
www.enervee.com

The Optimus H-4110 Electric Air Heater is 5% more energy efficient than the average for Heaters

Like · Comment · Share



\$198.85

The Optimus H-4110 Electric Air Heater is 5% more energy efficient than the average for Heaters. The 5 year electricity cost is \$198.85

enervee.com

Facebook, Google+, Twitter, Pinterest icons

THE BUSINESS - DATA AND TECHNOLOGY

- Integration and matching of dispersed data sources
- Proprietary architecture and product usage models
- Unlimited data feeds
- Scalable standards: python, django, postgres
- API scaling via mashery.com
- Building a dynamic eco system connecting social, commerce and energy data

Model groups
▪ Shop
▪ Redirects
▪ Accounts
▪ Registration
▪ Utility
▪ Sites
▪ Ice
▪ Pages
▪ Raw_utility
▪ Contenttypes
▪ Core
▪ Sessions
▪ Auth
▪ Django_facebook
▪ Platt
▪ Geo
▪ Carma
▪ Raw_usage
▪ Admin
▪ Feeds

Model documentation

Shop
Category
CategoryContent
CategoryEnergy
CategoryExtrapolation
CategoryRange
CategoryFilter
CategoryAlias
CategoryPriceFilter
CategoryTotalCostFilter
CategoryCertificationFilter
CategoryAttributeFilter
CategoryBrand
CategoryRating
CategoryRatingSummary
CategoryEfficiency
CategoryEfficiencyRange
CategoryEfficiencyPriceRange
Product
ProductContent
ProductOffer
ProductEnergy
ProductUsage
ProductSummary
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ProductAttribute
ProductCertification
List
Redirects
Redirect
Accounts
Profile
Registration
RegistrationProfile
Utility
Offer
ZipcodeOffer
StateAverage
Rate

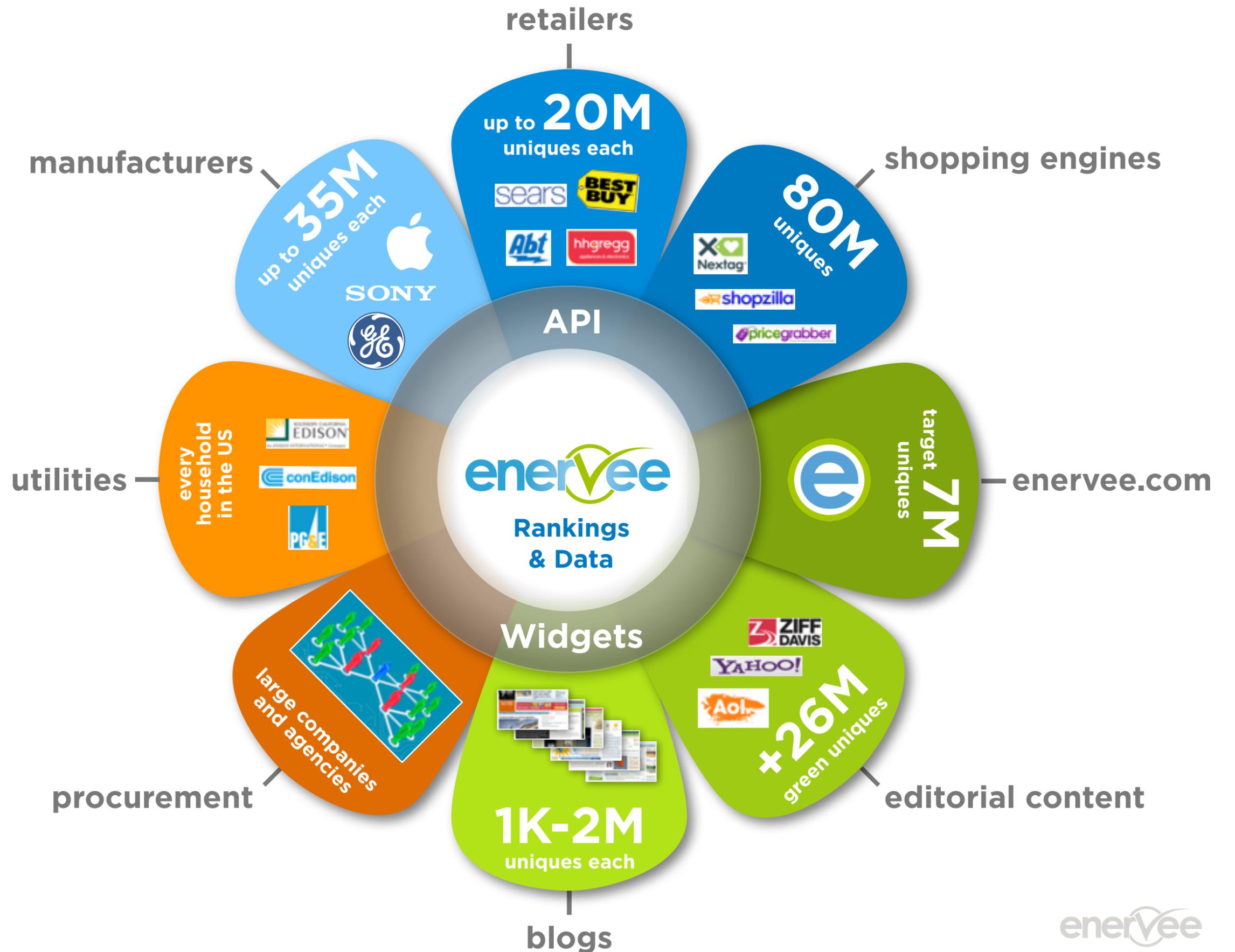
THE DATA - STATUS QUO

- **Product energy consumption**
Watts from manufacturers, often broken down in operational, sleep and standby
TEC or kWh/yr from EnergyStar and the FTC
- **Electricity rates by provider**
Average last year residential rates as reported to the states
- **Carbon intensity by plant**
Carbon Monitoring for Action (CARMA) is a massive database containing information on the carbon emissions of over 50,000 power plants worldwide
- **Carbon offset cost**
Daily updated rates from ICE Futures Europe - the leading market for CO2 emissions

THE CALCULATIONS

- Normalization of all critical data
brands, product features and attributes including unit conversion
- Category specific ranking methods
ranking attribute (i.e. screen size), usage model (currently time only)
- Standby power
product specific if available, substituted with category average if not
- Estimation of consumption
based on category ranking attribute if product specific data not available
- Energy efficiency rating
category-specific based on normalized ranking attribute vs. category median

THE API ENABLING THE ENERVEE DECISION NETWORK



THE BUSINESS - TRACTION

- Launched beta site on May 1, 2012
- Traffic is continuously growing from search and social referrals
- With currently over 100 visits/day we see confirmation of our business assumptions:
 - ▶ 7+ pages per visit with a visit duration of over 3 minutes
 - ▶ Conversion rate to affiliates peaks at over 10%
 - ▶ SEO ranking on page #1 for many terms like [“electricity cost for JVC TVs”](#)

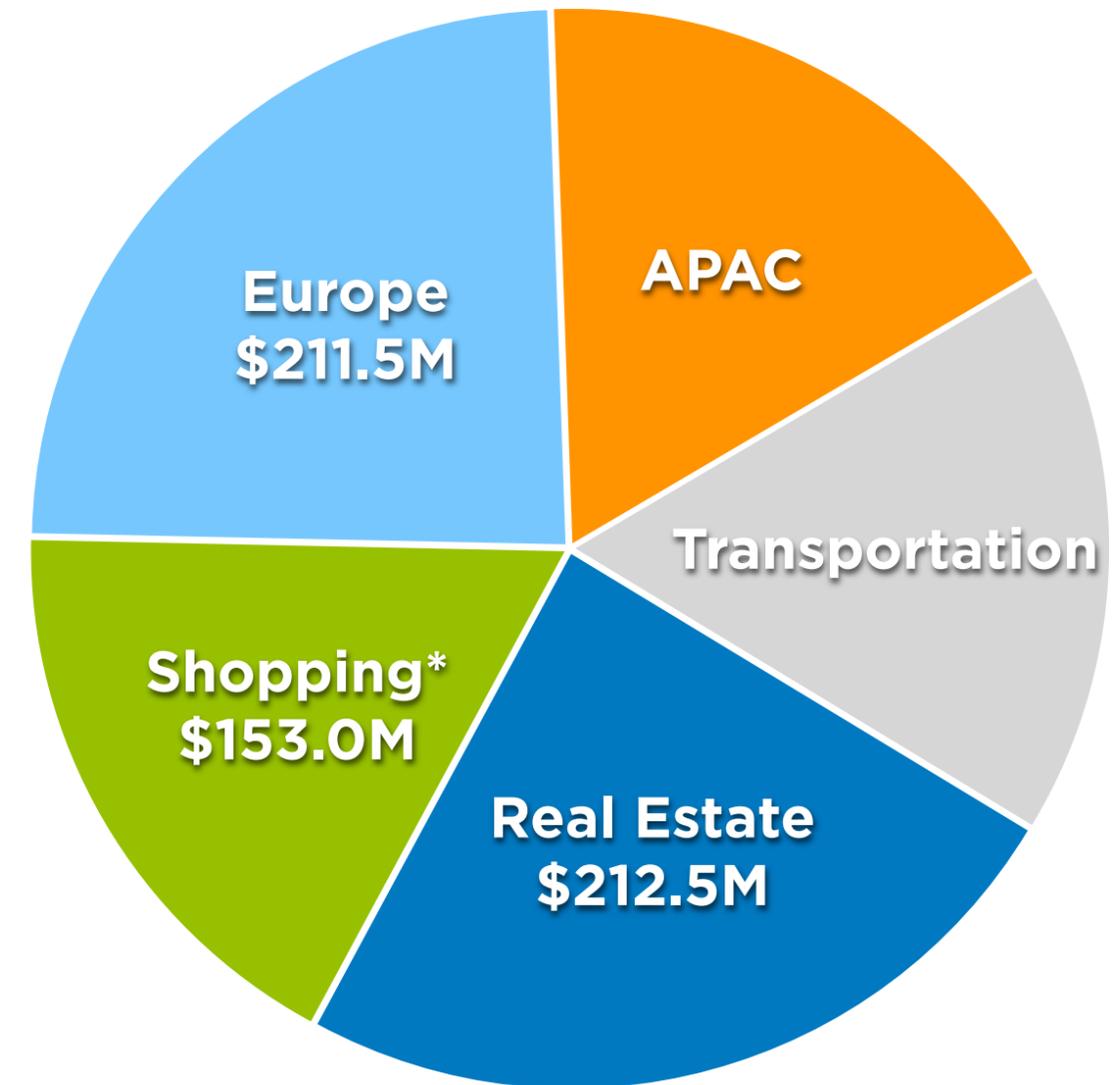
THE BUSINESS - GOING MOBILE

- Provides full product details for brick & mortar shopping
- Enables social sharing on the go
- Scans product barcodes
- Uses geo location to provide local utility rates
- Mobile Commerce 5yr CAGR is 39% reaching \$31B in 2016
- Enervee API can provide energy and eco data for other mobile apps



THE FUTURE - MARKET SIZE AND BUSINESS POTENTIAL IN 2015 \$540M+

- Current Enervee categories are 33% of total online retail spending
- Adding natural gas and water soon
- Inclusion of DSIRE to show federal and state incentives
- Future expansion into real estate and transportation
- Geographically into Europe and Asia



*Shopping = Consumer Electronics, Large & Small Appliances, PCs & Peripherals, Office Products
Assumptions: 540M Monthly Enervee API Calls drive annual US Revenue of \$81M from API and \$72M from Websites

A QUICK LIVE DEMO

Federal law prohibits removal of this label before consumer purchase.

ENERGY GUIDE ↓

Panasonic Corporation
Television TC-P60S30
TC-60PS34
TC-P60ST30

Estimated Yearly Energy Cost

\$28

\$31 | | | \$79

Cost Range of Similar Models (60" – 64")

- Based on 11 cents per kWh and 5 hours use per day
- Estimated yearly electricity use of this model: 255 kWh
- **Your cost depends on your utility rates and use.**

Visit ftc.gov/energy

TQF2AA636AB



READY FOR YOUR QUESTIONS

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