

AMEE

The Avoiding Mass Extinctions Engine

Hello

I'm Gavin Starks, director of d::gen network. We're a small UK company and have been developing AMEE since 2005.

Our vision is to enable people to measure energy consumption, then act and collaborate on the results.

Addressing our energy consumption is a global issue: one of the great challenges of our time. Our driving force has been Climate Change and the potential that, if we don't act, the world may face mass extinction events. However, we're not here to convince you about the issue of Climate Change

We believe that reducing energy consumption it is vital to our future development.

We're here to provide some of the tools and a framework for doing so.

If we made all the
energy consumption data
in the world accessible,
what would you make?



When we started, the idea of a “carbon calculator” was everywhere, but there was no standard. Everyone presented different results based on different assumptions. It wasn't convincing.

We have science and engineering backgrounds, and felt that unless the basic issue of measurement was addressed, nothing else would gain credibility, and no substantial or tangible would be possible.

We thought;

- 1) wouldn't it be great if there was a standard data set that everyone could trust
- 2) wouldn't it be great if everyone could see where the data had come from, and how it was created, and,
- 3) if we are facing a long-term, international movement, we'd better enable ways for people to share their data, their successes and their failures - to help make things better.

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CREATE A STANDARD

We need accurate data. To be authoritative, transparent and accessible we need to make all the assumptions and methodologies clear.

While some data is very simple - for example the power consumed by a 100W heater, other data is not, for example the CO2 impact of flying.

Our ideal was to obtain government data - and data from trusted peer-reviewed sources. We were absolutely delighted when (in Dec2006) Defra, the UK Government's environmental body, approached us to develop and use the platform.

However, we need much more than just Government data, we want to represent everything, the entire supply chain, from many perspectives - so everyone can make informed choices.

AMEE presents and promotes open data by default, but it can also represent copyright data. In the same way flickr represents copyright photos (if you have data that is licensed, AMEE can expand your commercial reach).

If you have any data on consumption or actions: we definitely want to talk to you.

AMEE has three components. The first is a calculator engine. For example, you can give it information about your car, such as make, model and mileage and it will return the kilograms of CO2 emitted.

AMEE is not the front-end interface that your users, consumers or businesses will use. It enables you to build your own branded front-end, for whatever purpose you can imagine.

You might want a calculator, a pledging system, or a trading system. It's up to you.



MEASURE

Enable scrutiny

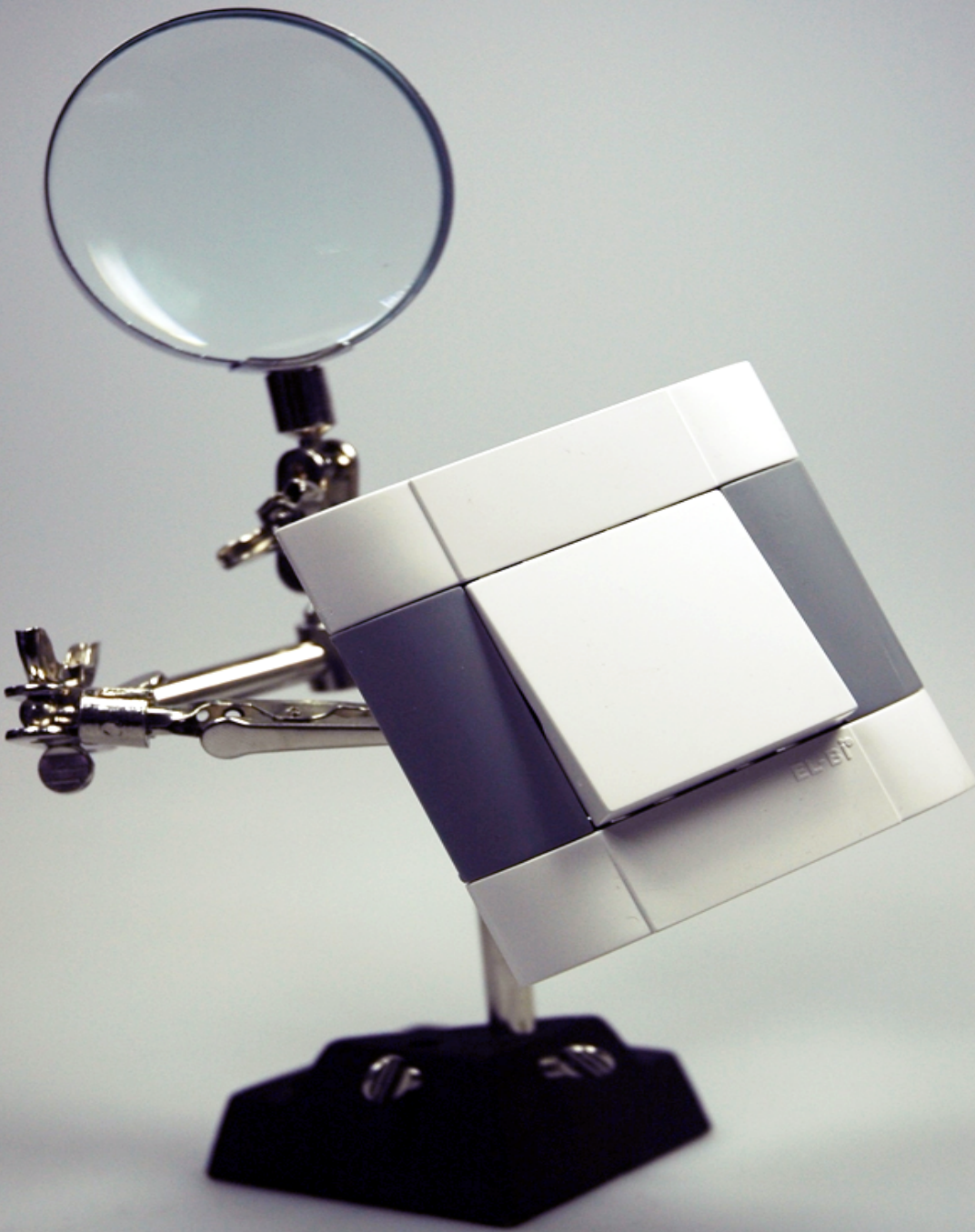
The second element is a methodology wiki.

This allows you to easily find out where the data came from and what assumptions were made to justify it. For example, you can find out what is meant by a “large” car and or a “long haul” flight. The wiki contains essential reference information, such as the UK Government's methodology papers.

AMEE has to strike a balance between wikipedia and science. For example, the data needs protection because there are quite high stakes, and significant financial implications related to their values.

Therefore, AMEE data is stated, fixed and clearly attributed to its source - but the wiki discussion is an open forum, where anyone can present their own views. We can add many data sets.

We feel this is of immense value to scientists, journalists, campaigners and interested members of the public.





The third element is a profiling engine. Any campaign or project that uses the AMEE platform can store the exact responses and track the history of their users.

This could enable, for example: monthly CO2 statements for individuals, personalised action plans, or a carbon trading system with kilograms of CO2 as its currency. It's up to you.


PROFILE

INDIVIDUALLY

The AMEE platform uses 'anonymous keys' so it should be easy to extend your existing systems without compromising data protection or security.

With AMEE you can profile individuals, or groups





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TOGETHER

AMEE promotes sharing and collaboration.

We believe sharing is the key to scaling. That to really, really scale, we need to share as much as we can.

If our tools are any good, people will make things. If we're lucky they'll make things that make a difference.

If we build in sharing to the model, every time someone makes something, everyone else benefits.



SHARE AND COLLABORATE

We take data protection very seriously - we don't store any personally identifiable information in AMEE.

We insist names, email addresses, etc. are stored in your systems, not ours. AMEE is designed to plug in to your existing contact systems.

If you choose to opt-in, we can create anonymised, cross-campaign reports that we hope will inspire everyone to collaborate.

IN AN OPEN ENVIRONMENT

Any data we produce is available under the Creative Commons “Attribution, Share-alike” license. The AMEE engine will be released under the General Public License, or equivalents, in due course. You can choose whether you want to build commercial or a non-commercial services based on AMEE.

To ensure AMEE is sustainable, we have lowered the barriers to entry: we operate the AMEE platform as a managed service, so you don't have to set-up or maintain databases, servers, bandwidth, etc. Using our managed platform, you also get the benefits or any improvements. We'll keep working on the engine and the data to make it as comprehensive as we can.

We combine paid-services with free access. We are already providing our AMEE managed services to a broad range of organisations and individuals, from bloggers to the UK Government. Some of them pay commercial rates, some less, others pay nothing at all. This is one way we think sharing helps.

If you are a large organisation with, say, a large CO2 footprint we would hope that you see the value what we are trying to achieve, the quality services we provide, and that your contributions will help smaller organisations and individuals have access to the same service for free.

To make this clear, open and binding, we've published our contracts and fees on our website.

We have a huge number of ideas for what we think is possible so, regardless of who you are, or what budgets you may or may not have, we still want to hear from you.

Please subscribe to our blog for updates, news and journeys and join us to make a difference.

Unsolicited review: <http://greenforge.net/?p=6>

“AMEE is open data, with no front end. That is its the Intel Inside, but shared. Its cool the UK government sees the benefit in sharing data here...

AMEE is perfect for correlation - so for example a service such as dopplr (a social network for frequent travellers) could use AMEE data to convert their miles tracking into carbon footprint tracking.

The idea is just to make the data better and better, through sharing.”

Rufus Pollock, Open Knowledge Foundation:

“AMEE is an as close-to-perfect open knowledge exemplar as we are ever likely to get, on one of the most important and compelling topics in the world today”

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<http://blog.co2.dgen.net> – news and updates

<http://wiki.co2.dgen.net> – methodology

<http://trac.co2.dgen.net> – code and documentation

<http://del.icio.us/rss/dgen.amee> – ecosystem

<http://groups.google.co.uk/group/amee-developer> – discussion



IMAGE CREDITS

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<http://blog.okfn.org/2007/05/22/amee-the-open-co2-emissions-platform/>