



Opportunities for Collaboration

Sponsorship
Product Testing
Approved Supplier

What is Project MetaHome?

Project MetaHome^{TM1} seeks to harness the most modern technology to create a home that is a joy to live in, is resilient to natural hazards, and uses 95% less energy than a comparable conventional home. The MetaHome delivers the highest Quality of Experience (QoE) to its inhabitants by harnessing the Internet of Things (IoT) to be both self-referential and continuously self-analytical through a parametric virtual model of itself. The project seeks to maximize the eXergy of a home, by maximizing not the “amount of useful work” but the amount of human comfort that can be extracted from the system that constitutes the home.

An often overlooked benefit of maximizing a system’s eXergy is that it significantly decreases the system’s risk profile. Deming² first demonstrated that improving quality actually decreases costs. But any re-insurer will attest that by increasing certainty and reducing variability, improved quality also decreases risk. The same self-analytical model that maximizes the eXergy of the home also minimizes risk by providing certain knowledge of the efficiency and maintenance status of the entire system.

The first prototype of a MetaHome is being created through a retrofit—to demonstrate how products already in the market can be used to maximize the eXergy of existing housing stock and leapfrog it into the future without “scrape and rebuild” demolition. We are actively recruiting companies interested in showcasing their product or participating in the engineering discovery process through a collaborative research agreement or using the data generated by the project or any combination of the above. If your company would like to collaborate in MetaHome research or take advantage of one of the sponsorship opportunities described below, please email pete@ideapete.com.

¹ The Project MetaHome name and logo are trademarks of Pete Baston, dba IDEAS. Use of the Project MetaHome name or logo is limited to IDEAS unless specifically authorized under a formal agreement, which will include an attribution requirement.

² *Out of the Crisis* by W. Edwards Deming, often credited with launching the Total Quality Management movement, offers his 14 key principles for transforming business effectiveness (“Deming’s 14 Points”). Point 5 is: “Improve constantly and forever the system of production and service, to improve quality and productivity, and thus constantly decrease costs.”

Collaboration Categories

Sponsorship

We offer a range of opportunities for in-kind or financial sponsorship support of Project MetaHome. Sponsors receive name recognition in all publications and media.

In-kind sponsors benefit from proof-of-concept field deployment of new, cutting edge products that contribute to residential eXergy. Installation and use of any equipment supplied will be fully documented, including calculation and analysis of initial and ongoing eXergy and risk scores over a full year of typical consumer use. In-kind sponsors may request confidential reports with eXergy scores and risk analyses that can be copied to insurers and/or re-insurers at sponsor's request. All raw data collected specifically on sponsor-provided equipment are proprietary to the sponsor, which grants MetaHome non-exclusive rights to use the data in whole system modeling and eXergy calculation, and to perform and publish summary analyses; reporting can be anonymized or credit the sponsor, at the sponsor's discretion.

Financial sponsors support specialized whole system or segment modeling or reporting of: eXergy and risk scores, engineering challenges and innovations, system efficiency and maintenance performance, or other parameters of interest to the sponsor that emerge from Project MetaHome.

Product Testing

MetaHome testing protocols measure each product's contribution to system eXergy and assess parameters that maximize user QoE. Manufacturers may submit individual products for testing and obtain individual product eXergy scores and user interface analyses, independent of the product's potential contribution to overall MetaHome QoE. Test design is at the discretion of Project MetaHome and all costs will be borne by the manufacturer. All raw data collected on devices under test are proprietary to the manufacturer, which grants MetaHome non-exclusive rights to use the data in whole system modeling and eXergy calculation, and to include anonymized summary results in published reports or analyses. Project MetaHome is not a registered testing laboratory and does not perform conformance or compliance testing. Test results do not guarantee fitness for use nor compliance with any standard or regulation and may not be represented as an endorsement, approval, or recommendation by Project MetaHome without explicit authorization by IDEAS.

Approved Supplier

Suppliers may propose products to be included in Project MetaHome, at reduced or no cost. Submission of a product for inclusion in Project MetaHome does not guarantee acceptance. Depending on the nature of the product, a sample or detailed engineering or material specifications may be required for initial testing and/or analysis. Results of such testing or analysis will be provided to the manufacturer on request and are considered manufacturer proprietary information. Products accepted for use in the project will receive name recognition in all publications and media and the right to display the Project MetaHome logo.