ZERO-POINT ENERGY MARKET?

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Summary

The world zero-point energy conversion market is estimated at \$500 billion. Thirteen different size units will be needed to meet the overall market. Engineering cost studies are needed to the best size unit for starting the business. It is expected that this will be either a 1.5 or a five kilowatt size.

Introduction

In meetings with entrepreneurs interested in my energy conversion method I always had the questions, "Where would you start? What is the first product you would build to sell on the open market?" My assumption had been that the entrepreneur would have a specific market in which he or she is interested and the question would be, "Will your method be suitable for the widget market, for example?" The person having a high energy cost might ask the latter question but the entrepreneur gets right to one of "What will my first product be and how long is it going to take to reach a break-even point?" Their questions have to be addressed.

My thinking over the years has been that the zero-point energy conversion market covers all areas where energy is used. Energy collection is done electrically, it will be done at a lower cost than with nuclear or fossil fuels and the logical place to start with the largest power plant available and a giant power organization such as T.V.A. Dr. Harold Puthoff said that he had discussed ZPE with executives of five major oil companies and that they would all welcome this development. I only discussed the idea with one oil company C .E.G. and was advised that would put 40 men on the energy conversion method the day after it was confirmed.

My experience has been that large organizations will not take the risk of a major departure from conventional energy conversion methods. Their strategy, as explained tome, is to wait until the market is developed to a secure and low risk level, \$50 million for example and then buy the company. We want to develop a market development strategy which will leave them out. It seems obvious that the greater the risk, the higher the gains. These gains will be maximized by starting from as small a base as is practical and not diluting ownership shares until a mature market is reached.

The Energy Market

Zero-point energy conversion is expected to replace all other energy applications. Data on applications are collected on the basis of end-use sectors and are given in the Statistical Abstact of the U.S. In 1991 expenditures were: (1)

End Use Sector	U.S. Total (Million \$)
Residential	114,740
Commercial	81,488
Industrial	99,701
Transportation	171,203
Total	467,132

We want -to replace one-half of -that in 10 years, or \$250 billion per year and all of it in 50 years. We want to reduce the total cost by one-half in 10 years which will result in an annual market of \$125 billion in the United States and a world market of \$500 billion. This will be equivalent to four companies the size of General Motors.

Statistical Abstract presents data in terms of dollars, horsepower in all prime movers, Btus and kilowatt hours, in marketing zero-point energy conversion devices we have to think in terms of installed capacity. A home may have an average consumption of one kilowatt per hour but the power supply has to be capable of delivering the peak load. This could be 10 kw in a well insulated home or 20 kw in a more traditional home. As no fuel is consumed, the cost is that of the installed unit. Once that unit has been paid off, operating cost will reduce to that of a small annual service contract.

Unit Sizes

Different unit sizes will be needed to fill all segments of the market. The strategy will be to design, build and evaluate a specific unit size as a first step rather than to design a unit to specifically replace all of the widgets in the world, for example. After the specific size unit has been designed, built and field tested, it may then be customized for the specific application.

A suggested ranking of unit sizes with some specific applications is as follows:

Number	Size	Discussion
1	0.5 KW	A small size demonstration unit is needed as the first step. This may consist of two 250 watt H.I.D. lamps and sold to science educators. Long term field
		test units need to be placed in tropical, moderate and frigid climates. It may also be sold as a space heater.
2	1.5 KW	Three 1.5 KW research models are presently in existence. These should be upgraded to their full 1.5 KW and used for engineering design and evaluation work. From these, three field evaluation units should be built and

		placed on long range tests. Markets may be: portable power supplies, space heaters, room air conditioners and lighting and battery booster units.
3	5 KW	This may be large enough for homes in certain areas. It may also be suitable for motel space heater and air conditioning units.
4	10 KW	This size will power a well insulated home.
5	25 KW	This size will be suitable for commercial refrigeration systems and moderately
		insulated homes. It also gets into small electric vehicles.
6	100 KW	This size will be needed for industrial units.
7	500 KW	This size is needed to replace diesel electric power units.
8	2 MW	This will replace diesel units.
9	6 MW	This is the median size for utility distribution stations.
10	15 MW	This size is needed for arc furnaces.
11	50 MW	This is the size needed for small co-generation plants.
12	150 MW	Larger co-generation power plants.
13	350 MW	For large power plants.

Start-up Size

As mentioned above, it is desirable to start with the smallest size unit which will develop a break-even point market. Long term field testing needs to be initiated as soon as is practical as these data have not yet been developed. The smallest size unit which will develop the desired market has to be designed, constructed and tested in order to have good cost estimates. Cost per KW will go down as the size is increased and the profit-cost curve needs to be established before fixing on the specific start-up models. Market studies made in parallel with the cost estimations will be needed to decide on the specific market for the beginning of manufacturing. It may be found that the 5 KW size will be the smallest which will yield the desired return on investment. The two smaller sizes will still be needed for field work and marketing development.

It will be desirable to minimize sales and marketing costs in the beginning. This may be done by involving a market leader in the project from the specific market area and to do this at an early stage.

Expansion of the business after sale of the first product should be effortless. Applications will be either obviously beneficial to the consumer or a different market area will be developed. It will be important for the entrepreneur to be able to respond to the market requests which come in and to respond in a reasonable length of time.

It is also important to keep in mind that the return from a 5 MW distribution station will be equivalent to that from 1000 five KW sales and will cost far less to develop and service. It is necessary to start with a small energy collection size and it is also important to start work on the larger size as soon as the interest develops. This will probably require the participation of at least one public utility.

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(1). Statistical Abstract of the U.S. 1994