

The IFC/GEF Poland Efficient Lighting Project (PELP): Evaluation Results and Next Steps

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1 - SYNOPSIS

The Poland Efficient Lighting Project (PELP) funded by the Global Environment Facility and executed by the International Finance Corporation (IFC), reduced Polish CO₂ emissions by 2.9 million tons, at an average cost of \$1.34/ton, using market-based tools.

2 - ABSTRACT

To reduce emissions of greenhouse gases emitted by Poland's energy sector, the International Finance Corporation (IFC), which is the private sector arm of the World Bank Group, developed a Global Environment Facility (GEF) project known as the Poland Efficient Lighting Project (PELP).ⁱ PELP, which was active in Poland from June 1995 until June 1998, was the first GEF project designed to work directly through the private sector. PELP reduced electricity consumption by stimulating the Polish consumer market for efficient lighting products.ⁱⁱ

PELP provides useful examples of approaches to help transform consumer lighting markets from incandescent to fluorescent lighting. PELP applied competitive, market-based program tools that achieved large increases in sales of compact fluorescent lamps (CFLs) at a lower cost per CFL than many other similar efforts to promote CFLs to consumers.ⁱⁱⁱ PELP has also been able to measure electric utility peak load reductions from the targeted installation of CFLs in limited geographic areas, providing new motivation for electric utility support of these types of programs. Finally, by working with Polish government agencies, NGOs and international organizations, PELP was able to generate broad public interest and create within the Polish market a widely recognized symbol for lighting efficiency and quality. IFC is building on the PELP Legacy by allocating the funds unspent at the close of PELP to further public and private sector promotion of energy-efficient lighting in Poland. Furthermore, based on experience with PELP and other lighting programs, IFC will implement a \$15 million GEF Efficient Lighting Initiative (ELI) in seven developing and transitional countries around the world.

3 - INTRODUCTION

In 1993, a USAID study of demand-side management (DSM) potential in Poland identified significant energy consumption associated with lighting in the residential, commercial and industrial sectors.^{iv} In the residential sector, lighting use accounted for 14,550 GWh, or 55% of total electricity consumption for the sector, representing a total installed end-use capacity of 13,250 MW. This was consistent with an almost exclusive reliance on inefficient incandescent lighting technology in Polish homes and the low incidence of other major electric appliances such as heating or air-conditioning equipment. Thus, in the Polish residential sector, improved lighting energy efficiency provided an opportunity to significantly reduce electricity consumption.

In late 1992, the Environment Division of the IFC^v undertook a review of its investment portfolio with support from the International Institute for Energy Conservation (IIEC), an international NGO. The purpose of the review was to identify energy efficiency projects with clear environmental benefits that could be implemented with support from the pilot phase of the GEF.^{vi} With project design input from the Polish Foundation for Energy Efficiency (FEWE) and Battelle Pacific Northwest Laboratories in the US, IIEC proposed the development of a western utility-style DSM program using GEF pilot phase funds to stimulate the Polish domestic market for CFLs.^{vii} PELP received approval from the GEF in December 1994 for the use of US\$ 5 million in pilot phase funds. The IFC and its Environment Division were assigned responsibility by the World Bank and GEF for managing project implementation.

The PELP work plan and budget centered around the concept of a CFL promotion, but also tried to approach the Polish consumer lighting market in a comprehensive fashion by looking at luminaires and by specifically developing a strategy to increase the Polish public's awareness of energy-efficient lighting.^{viii} Special attention was also given to ensuring that PELP's environmental impacts would be thoroughly evaluated using state of the art techniques. The allocation of PELP resources is shown in Table 1.

Table 1 : Summary of PELP Costs

Project Components	US\$
CFL Subsidy	2,613,682
Public Education	548,720
DSM Pilot	632,545
Luminaire Program	89,739
Cooperative Promotion	50,836
Project Monitoring and Evaluation	310,312
Project Administration	636,992
Total	\$4882,826

4 - THE POLISH RESIDENTIAL LIGHTING MARKET BEFORE PELP

An estimated 209.5 million incandescent general lighting service (GLS) lamps were in use in Poland in 1995. Annual sales of incandescent lamps are on the order of 200 million. The average Polish home had 15 standard "Edison base" electric lamp sockets. The Polish CFL market was established in 1992, when Philips Lighting Poland began selling CFLs domestically. Prior to this, Polish sales of imported CFLs had been negligible. In 1995, CFLs cost over thirty times as much as an incandescent lamp. Although CFLs were nevertheless a cost-effective investment for Polish consumers at current electricity rates, this price difference posed a significant "first cost" barrier to consumers. Therefore some type of product subsidy to lower the retail price was seen as the most effective way to stimulate the market.

5 - THE PELP CFL SUBSIDY PROGRAM

5.1 Background and design concept

The manufacturer buydown approach, developed at Southern California Edison, a large electric utility in the US, was chosen by IFC and IIEC as the template for the PELP CFL Subsidy program because it promised the largest increase in CFL sales at the lowest cost. Through this program, PELP subsidies were available to reduce the retail prices of CFLs from any manufacturer that was able to meet minimum technical requirements and also substantially manufacture its products in Poland. The program applied competitive market principles to encourage manufacturers, wholesalers and retailers to increase the availability and decrease the price of CFLs to consumers. Manufacturers were given a great deal of freedom to decide which CFLs to subsidize and how much

subsidy to apply. The intention was to use the manufacturers' knowledge of the marketplace to maximize CFL sales, and thereby maximize energy savings per dollar of available subsidy.

Manufacturers participating in PELP competed with each other for the right to apply the subsidies. The right to use a larger share of subsidies was given to those manufacturers who were able to provide the greatest savings, in terms of projected avoided electricity use resulting from increased CFL sales, at the lowest cost to the program. Manufacturers also had a limited amount of time to demonstrate these increased sales. If a manufacturer was unable to sell as many subsidized CFLs as they had been awarded during a designated sales period, the entitlement to those subsidies was reallocated to a more successful competitor. In this way, PELP preserved and strengthened competitive forces in the marketplace and used them to achieve project CFL sales goals.

5.2 How the “Manufacturer Buydown” Functions

PELP provided subsidies to decrease the prices for eligible CFLs at the beginning of the product distribution chain. Participating manufacturers agreed to pass on the full value of the subsidies they were awarded to their distributors in the form of lower wholesale prices. Manufacturers were also encouraged to contribute additional wholesale price reductions and advertising. Shares of subsidies were to some extent awarded on the basis of these contributions. The subsidies eventually flowed through to consumers in the form of lower retail prices. Distributors and retailers were discouraged from simply pocketing the subsidy and keeping retail prices high by suggested retail prices which were displayed on each CFL sold.

Under PELP manufacturers did not receive subsidies directly, but benefited indirectly from being able to sell their products at lower prices. In fact, manufacturers actually financed the subsidies by first selling CFLs at reduced factory prices, and then applying for reimbursement. Subsidies were only paid following manufacturer submission of “proof of performance” documentation showing that the specified CFLs had been sold at the agreed-upon retail prices through appropriate channels. In addition, participating manufacturers were also required to assist in conducting program monitoring, in controlling product distribution, and in helping to limit attempts by distributors or retailers to profit from PELP by raising prices.

The PELP CFL Subsidy program yielded larger reductions in retail prices for each dollar of subsidy than would have been achieved by, for example, a program that provided subsidies directly to consumers in the form of rebates or discount coupons. Most distributors and retailers in Poland (and other countries) calculate wholesale and retail prices by multiplying manufacturers' factory prices by a set markup percentage. In addition, VAT (value added tax) in Poland that is paid by manufacturers, distributors and retailers is also based on a set percentage of the factory, wholesale and retail prices respectively. A rebate given to the consumer decreases the price of the CFL after wholesale and retail markups and VAT. When the rebate is given to the manufacturer to reduce the factory price of a CFL, both the retail mark up and the VAT paid are also reduced. For example, by the time a 15% wholesale markup, a 25% retail markup, and a 22% VAT are factored in (75% total increase over factory price), a US\$ 1.00 PELP subsidy on a CFL in Poland reduces the retail price by US\$ 1.75.

For PELP, the direct manufacturer subsidy approach also had administrative advantages over comparable retail-level program designs, including greater control over product price and availability, and reduced program overhead costs. Because the manufacturer subsidy required relatively few transactions at the manufacturer level, administrative expenses were low. The total combined cost of subsidies and administration for the PELP CFL Subsidy was about US\$2.87 per CFL subsidized.^{ix}

5.3 PELP Program Experience

The PELP CFL Subsidy offered specially priced CFLs during the winter “lighting season,” roughly October through March, when sales of residential lighting products in northern hemisphere countries tend to be at their peak. During the winter of 1995-1996 four manufacturers of CFLs qualified for participation in a first pilot season of the PELP CFL Subsidy. The four manufacturers all signed agreements and sold subsidized products but only two were able to make full use of the available subsidies allocated to them. One manufacturer encountered product availability problems and used only a small amount of subsidies and another encountered difficulties with meeting Polish government electrical safety regulations and was eventually not able to participate in PELP. As designed, the subsidy allocations initially made to the two non-performing manufacturers were reallocated to their more successful competitors. As a result, the PELP sales goals were met for the first season and 337,636 CFLs were sold.

During the winter of 1996-1997 the amount of subsidies available through PELP was substantially increased. Three manufacturers participated and the two who were successful during the first season were once again the ones able to take full advantage of the subsidies. The third manufacturer's subsidy allocation was redistributed and PELP program goals were met with over 800,000 PELP CFLs sold. The average subsidy per CFL during the second season decreased by more than 25% relative to the first season because prices for both PELP and non-PELP CFLs on the Polish market had decreased, and because consumer demand had increased. The value of the subsidies and retail price reductions is presented in Table 2.

Table 2 : PELP CFL Subsidy Program Leverage

PELP CFL Subsidy Program Leverage	Total PELP
CFL Sold	1,218,888
Average PELP Subsidy per CFL	\$2.14
Total GEF Subsidies Used	\$2,614,247
Average Manufacturer Contribution per CFL	\$1.23
Retail and VAT multiplier	1.7538
Total leveraged contributions (include voluntary manufacturer contribution, and avoided retailer mark-up and VAT)	\$4,590,148
PELP leverage (ratio of GEF funds contributed to funds contributed by manufacturers, distributors, retailers, and avoided VAT)	1 : 1.8
Average Retail Price Reduction per CFL	\$5.91

6 - THE PELP PUBLIC EDUCATION PROGRAM



Figure1 : The PELP “Green Leaf”Logo

The Public Education component of PELP promoted the CFL subsidy program to the public by providing general consumer information on the benefits of energy-efficient lighting from a trusted, non-industry source. The PELP “Green Leaf” logo, developed by Polish advertising firm Studio P (see Figure 1), was promoted as a way for consumers to identify energy-efficient, high quality products. In the generic advertising developed by PELP, the PELP logo appeared alongside the names and logos of widely respected Polish organizations: the Polish Consumer Federation, the Polish Ecological Club and the Polish Energy Conservation Agency (KAPE) and FEWE.

The logo was used on posters, in PELP publications, and in the promotion of PELP in the Polish press including a short television spot and advertisements in many publications. Articles on PELP and energy-efficient lighting, written by PELP contractors and professional journalists who attended PELP's two press events (January 1996 and May 1997) were also published in leading Polish newspapers and magazines. As a result

CFLs, at least temporarily, achieved a relatively high profile in Poland. It is interesting to note that media coverage of CFLs changed over time, from a simple introduction of the product to more elaborate discussion of the best models for various home applications. This evolution in the way the press covered CFLs mirrors the evolution of Polish perception of CFLs from an unfamiliar product to a familiar one.

The Public Education component of PELP also included an energy efficiency education program for Polish grammar schools. During 1996 PELP and the World Wide Fund for Nature (WWF) Germany jointly funded an education consultant to develop a competition for school teams, pupils and teachers on energy efficiency themes. Over 1,000 participants from 250 schools all over Poland took part in the competitions and the activities were endorsed by the Polish government's Ministry of Education. Additional PELP education activities targeted professional lighting designers including an energy efficiency awareness program in the Krakow area developed by the Polish Ecological Club (PKE). As a result of the PELP lighting design seminars, a Polish university has decided to include energy efficiency in its lighting design curriculum.

7 - THE PELP PILOT DSM PROGRAM

7.1 Background

Based on a U.S. utility program model, PELP was originally designed to work closely with Polish electric utilities. Unfortunately, Poland's excess electricity generating capacity made it difficult for Polish utilities to participate directly in PELP or other electricity efficiency programs. However, by working through FEWE and targeting three smaller cities with interested municipal governments, PELP was able to implement a successful DSM pilot that eventually obtained the cooperation of local electric utilities, and demonstrated quantifiable distribution system benefits to them.

While Poland has excess generating capacity on the national level, Polish utilities are also having difficulties serving load growth at certain points on the distribution grid due to transmission constraints. Urban centers with underground electricity distribution were particularly expensive to upgrade and represented attractive opportunities for CFL-based peak load reduction strategies. FEWE estimated lighting to represent 50% of the residential peak electricity demand in Poland. This implied a substantial opportunity to reduce residential peak load with CFLs.

7.2 Program Experience

The three small cities targeted by the PELP DSM Pilot program all experienced electricity distribution system constraints in certain neighborhoods. Major activities took place in Chelmno, a city of about 22,000 in the northern part of Poland and Elk, a city of about 54,000 in the northeast region of the country. A smaller scale effort also took place in the town of Zywiec. The electrical distribution system in each town was monitored at several different points, from several individual residences up to the subsystem level. Monitoring began before the targeted CFL promotion and continued afterwards to allow a determination of peak load reductions attributable to the CFLs installed.

In order to lower the peak electricity demand in the capacity-constrained neighborhoods, the DSM Pilot program needed to achieve very high concentrations of CFLs in a limited geographic area. This requirement meant that the approach used in the PELP CFL Subsidy program, the manufacturer subsidy, would not be appropriate. Pre-PELP retail sales of CFLs in the target cities had historically been very low and CFL retailing was not well established. Therefore, it was decided that the PELP DSM Pilot would try a series of consumer discount coupons coupled with high intensity marketing and a special product distribution system. CFLs were purchased in bulk directly from the manufacturers on a competitive basis. Once again, manufacturers discounted their wholesale prices for CFLs purchased. Consumer rebate coupons were distributed throughout the target cities, but the subsidies were scaled so that residents living in the capacity constrained areas received the highest rebates. Municipal officials and civic organizations helped promote CFLs. Because the coupons were only valid for a limited time there was a sense of urgency about the campaign which created a level of excitement in the town. The campaign was successful and in the capacity-constrained neighborhoods, an average of more than 5 CFLs were purchased and installed per household.

After the introduction of CFLs to the target area in Chelmno, peak power levels at some 0.4 kV monitoring points declined by approximately 15%. Additionally, some monitored households in the target area exhibited up to a 40% reduction in peak power demand after CFL installation. The CFLs installed were primarily

electronically ballasted models available in most European markets and did not have power quality correction circuitry. A 10% increase in total harmonic distortion (THD) was observed at the 0.4 kV monitoring point. Neutral wire current increases were insignificant.

8 - THE PELP MONITORING AND EVALUATION PROGRAM

8.1 Methods

PELP monitoring and evaluation efforts were designed to assess both the direct impacts of the purchases of GEF-subsidized CFLs, and the longer-term market transformation impacts of the broader program on greenhouse gas emissions in Poland. The US consulting firm SRC (now RMI) was competitively chosen as the contractor to develop and implement a comprehensive evaluation plan. The Polish firm EEI Market Research was contracted to perform much of the associated surveying and market research.

The impact of the program on the CFL market was estimated by analyzing survey data of consumers, PELP CFL purchasers, lighting retailers and distributors, and manufacturers. Data on the number of PELP CFLs installed in each room, their wattage and the wattage of the bulbs they replaced were derived from a database of more than 10,000 responses received from CFL purchasers who hoped to win a free appliance by returning a product response card. Data on other key impact parameters were collected through surveys with general consumers and with PELP CFL purchasers.

Evaluation activities for PELP were also designed to allow continual fine-tuning of PELP's functions, and to maintain the project's responsiveness to its objectives. Results from EEI's marketing surveys were used to modify the operation of the CFL Subsidy marketing activities, the determination of subsidy levels, product distribution approaches, and manufacturers' eligibility status for continuing project participation. PELP accumulated an extensive portfolio of research into the Polish residential lighting market including surveys of retail prices for CFLs in different parts of Poland; surveys of consumer awareness and incidence of CFL ownership; telephone and onsite surveys of retail shops to determine the availability and pricing trends of CFLs; and consumer surveys to evaluate the effectiveness of the PELP media campaigns in creating awareness of the PELP program and recognition of the PELP program logo.

8.2 Results

PELP significantly increased the penetration of CFLs in Polish households, as shown in Figure 2. The dashed line shows a forecast of what the penetration of CFLs in Poland would have been, if sales in Poland had followed the same pattern as the rest of Central and Eastern Europe. These data indicate that PELP may result in reaching CFL market saturation approximately three years earlier than if the initiative had not been undertaken.

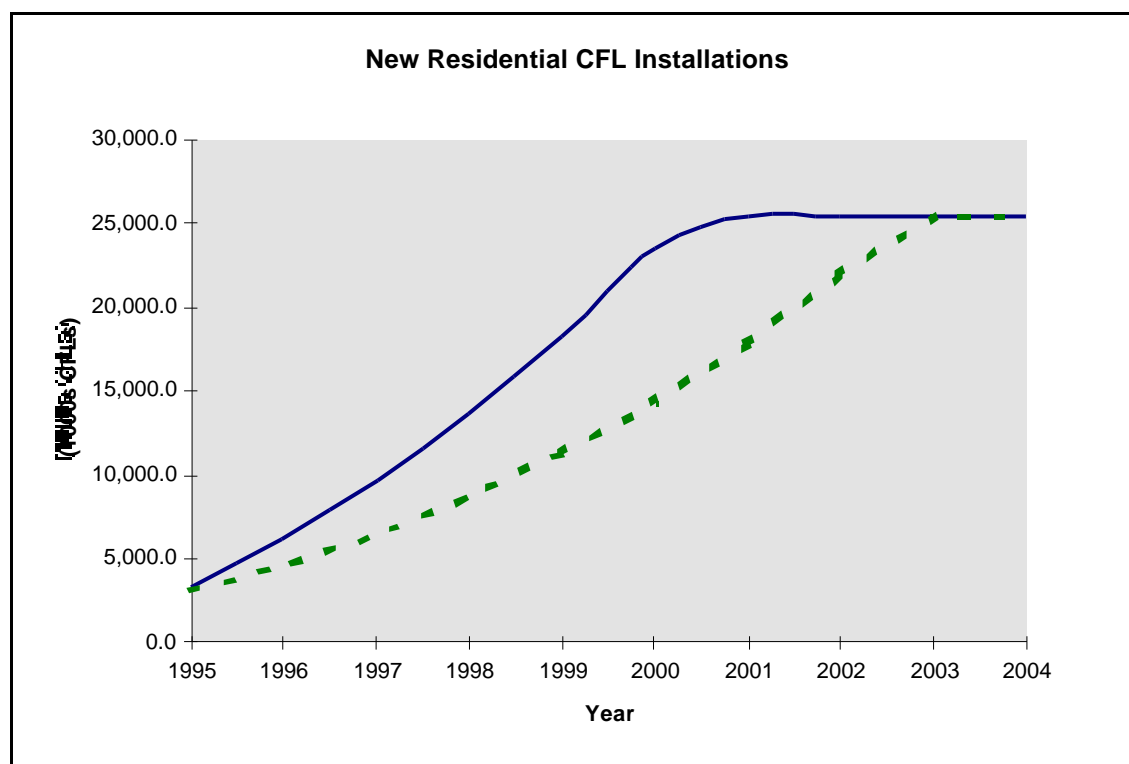


Figure 2: Summary of PELP Environmental Benefits

Table 3 below summarizes the preliminary electricity savings and greenhouse gas reductions due to PELP (final results are still being calculated). The analysis of the program's *direct* impacts accounts for the kWh and CO₂ emission reductions only due to the PELP-labeled CFLs sold during the two CFL subsidy periods (Fall lighting season 1995-96 and 1996-97). The direct impacts were estimated using standard evaluation methods for residential lighting programs. PELP's energy impacts were quantified through impact parameters that represented key data, such as the number of CFLs installed in each type of room (kitchen, living room, bathroom, etc.), the average number of hours each room's CFL was on over the course of one year, and so on. Once the program's annual impact in terms of energy (kWh) savings was estimated for the life of the lamps, these values were then converted to the total amount of CO₂ reduction resulting from the program, using annual estimates of the emission rates of plants generating marginal power.

Table 3: Summary of PELP environmental Benefits

	GWh Savings	Thousand Tons CO ₂ Reduced	Cost/ton CO ₂ Reduced
CFL Subsidy Direct Impact	642	765	\$5.08
CFL Subsidy Total Program Impact	2,437	2,907	\$1.34

Total program impacts account for the overall market transformation impacts of the program, and therefore are larger than the direct impacts. Total impacts were calculated by using the estimate of kWh savings per CFL derived from the direct impact analysis, and defining a projection of CFL sales from the start of the program until several years in the future. This projection was then compared to a baseline projection for Polish CFL sales if there had been no PELP. The baseline was based on aggregate CFL sales data from Central and Eastern Europe (minus Polish CFL sales). The difference between the two projections represents the total increase in energy savings resulting from PELP, including installation of CFLs during and after the program that were not subsidized by PELP ("free drivers").

By the end of PELP, the retail price of CFLs had decreased by 34% in real terms relative to 1995. Polish CFL market experts and manufacturers agree that the PELP CFL subsidy and promotion campaign are partly responsible for this dramatic price decrease: the PELP subsidy campaigns helped “break” prices, and they simultaneously increased CFL demand to the point where the price decrease was sustainable.

The PELP evaluation tracked several residential CFL market indicators that can help gauge long-term changes in the Polish CFL market. Some signs of sustainable market transformation include:

CFL penetration increased from one in ten Polish households owning at least one CFL prior to PELP to one in three, a year after the program.

CFLs are sold by a larger number of shops, and in a wider variety of shops (small shops ranging from hypermarkets), than before the program, and shops now carry a wider variety of models.

97% of CFL purchasers surveyed intend to replace those CFLs with another CFL when the current one burns out.

Print media coverage of CFLs increased and shifted from describing CFLs to explaining where and how to best use them.

PELP expanded awareness of CFLs among distributors and retailers throughout the country as a result of extensive training by manufacturers, which would not have occurred if there had not been a program.

Furthermore, during the second season of PELP a global manufacturer of CFLs decided to enter the Polish market. The manufacturer credits PELP for at least part of the decision to make a commitment to the Polish market. As a result, three major international CFL manufacturers now market their products in Poland, which should increase availability and decrease prices in the long run.

9 - BUILDING ON THE PELP EXPERIENCE

9.1. Within Poland – Cooperative CFL Promotion, Streetlighting ESCO, Housing Blocks

In late 1997, the opportunity arose to develop an additional promotional CFL campaign using cooperative advertising, but with no subsidies. This “Cooperative Promotion” initiative was designed to build upon the momentum created from the two previous PELP campaigns. PELP funded a generic CFL advertising campaign featuring the PELP Green Leaf logo. The manufacturers contributed to the cost of the advertising, and were encouraged to offer voluntary price reductions during the 3-week promotional period. Advertising ran over three and a half weeks starting February 1998 and manufacturers were allowed to display the PELP logo on their packages, from January through April 1998. The PELP logo appeared on roughly 400,000 CFL packages.

At the close of PELP, some funds from the budget (primarily accumulated interest) remained unspent. IFC requested that FEWE submit a proposal for the use of these remaining funds. In response, FEWE prepared a business plan for Business Energy Ecology Sp z o.o. (BEE), a new lighting Energy Services Company (ESCO) to which FEWE would be a minority shareholder. BEE principals were all involved with implementing PELP, and they will draw on the experience and contacts they gained through PELP to strengthen the new business.

IFC will also allocate a smaller share of the remaining PELP funds to a Polish NGO to create an in-house project to increase the penetration of CFLs in housing blocks and cooperatives through the application of methods used PELP DSM pilot: a highly targeted, local campaign, and a limited time period in which to purchase the lamps.

9.2. Outside Poland -- IFC/GEF Efficient Lighting Initiative (ELI)

Many other countries have approached IFC about hosting a PELP-type CFL promotion. In response, IFC submitted a proposal to the GEF for a \$15 million Efficient Lighting Initiative (ELI). The GEF Council endorsed the ELI Project Concept Document in July 1998. ELI will use a combination of market-based tools to stimulate markets for a broad range of energy-efficient lighting technology in Argentina, Peru, South Africa, the Czech Republic, Hungary, Latvia and the Philippines.

10 - CONCLUSION

PELP showed that a high-profile CFL promotion program could be operated at a reasonable cost using private sector delivery channels and approaches in a country with a restructuring economy. PELP also showed that CFLs could be part of a residential peak electricity load reduction program and may provide an additional reason for utilities to be interested in sponsoring such programs.

With long-term sustainability one of the project's primary goals, PELP was designed to be a market transformation project. PELP's goal was not "to sell a certain number of CFLs," but rather, to identify and then remove the barriers to widespread consumer adoption of CFLs.

In 1994, Polish CFL awareness was low, the lamps were quite expensive (\$23) as compared to standard incandescent lamps (under \$1). Only a few models of CFLs, made by a small number of manufacturers, were available. Those models could only be found in a limited number of shops, whose staff were not necessarily aware of the product's advantages.

At the close of PELP, the market in Poland had clearly been transformed. CFL awareness was high, and the price of CFLs had dropped to around \$10. CFLs from more manufacturers were available in more shops, and shop staff were better educated on the product's merits. Annual sales grew from 500,000 in 1994 to 2.1 million in 1997, and the penetration of CFLs increased from one in ten to one out of every three homes.

11 - ACKNOWLEDGEMENTS

The authors wish to thank the IFC and GEF for their sponsorship of this project and in particular Mr. Dana Younger, IFC's GEF Coordinator in the Environmental Projects Unit, for his contributions to this paper. Significant contributions were also made by Mr. Steve Ryder, an IFC summer intern, Steve Hastie of RMI, who wrote the PELP evaluation report, and Mr. Andrzej Jarosz, the PELP Polish Project Manager.

12 - REFERENCES

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13 - ENDNOTES

ⁱ This paper updates material first presented in Granda Chris, 1997. “Case Study : The IFC/GEF Poland Efficient Lighting Project (PELP)”. Proceedings of the Right Light 4 Conference, November 1997, Copenhagen. Denmark.

ⁱⁱ A preliminary review of the plan for PELP was presented at Right Light 3. Boyle, S., M. Ledbetter and R. Sturm. 1995. “Efficient Residential Lighting In Poland: An Innovative IFC/GEF Project”. Proceedings from the Right Light 3 conference.

ⁱⁱⁱ The IFC is the largest multilateral source of loan and equity financing for private sector projects in the developing world.

^{iv} Hagler Bailly Consulting, Inc. 1993. “DSM in Poland: Assessment and Pilot Program”. USAID. Washington, DC USA.

^v Borg, Nils, and Martinot, Eric, 1998. “Energy-efficient Lighting Programs : Experience and Lessons from Eight Countries”. Energy Policy, Vol. 26, no. 14.

^{vi} The GEF is an entity that provides grants and concessional funds to recipient countries for projects and activities that aim to protect the global environment. The GEF Implementing agencies are the United Nations Development Program (UNDP), the United Nations Environment Program (UNEP) and the World Bank.

^{vii} International Institute for Energy Conservation and Battelle Pacific Northwest Laboratories. 1994. Pre-Appraisal Report to the Global Environment Facility: IFC/GEF Poland Efficient Lighting Project. World Bank. Washington, DC USA

^{viii} Further information on PELP may be found in the GEF Project Document: “Republic of Poland: Poland Efficient Lighting Project”. September 1996. World Bank. Washington, DC, USA.

^{ix} This assumes that all public education costs, all monitoring and evaluation costs and 75% of PELP administration costs went to directly support the CFL subsidy. This does not include IFC staff time and expenses, which was slightly less than one full time equivalent person during the course of the program.