

IMPACT INVESTMENT

CLIMATE POLICY PROJECT

»PEOPLESHOME«

ENERGY INVESTMENT

TANZANIA



100 MEGAWATT RENEWABLE GRID POWER

ULRICH KRETZSCHMAR



The issue of environment has never been more important than today.

PEOPLESHOME Impact Investments link the renewable energy generation with the enhancement of infrastructure in emerging markets.

Ulrich Kretzschmar, 2017

Ulrich Kretzschmar, Founder
PEOPLESHOME & ASSOCIATES
Initiating of Impact Investments

Office Berlin:
PEOPLESHOME Association
Nassauische Strasse 6
D-10717 Berlin

Phone: D +49 / 30-509.249.02
Mail: info@peoples-home.org
www.peoples-home.org

THE BUSINESS

Tanzania has a large scale of Solar yields with a moderate location characteristics and perform secure energy generation.

The investment scheme is based on the provision of international equity (16.1%).

The Industrial and Commercial Bank of China has submitted a strong letter of intent for providing a loan of up to 231 million x 1,000 TZS for 100 Megawatt in total.

Assuming this loan financing the equity/loan ratio would be at 1 : 5.3

The project has a stable cash flow which is guaranteed by the national government (FiT/PPA calculation is at 268.71 TZS/KWh) and has a strong value of saleability and is projected for 20 years (Dividends Guarantee 4.2%).

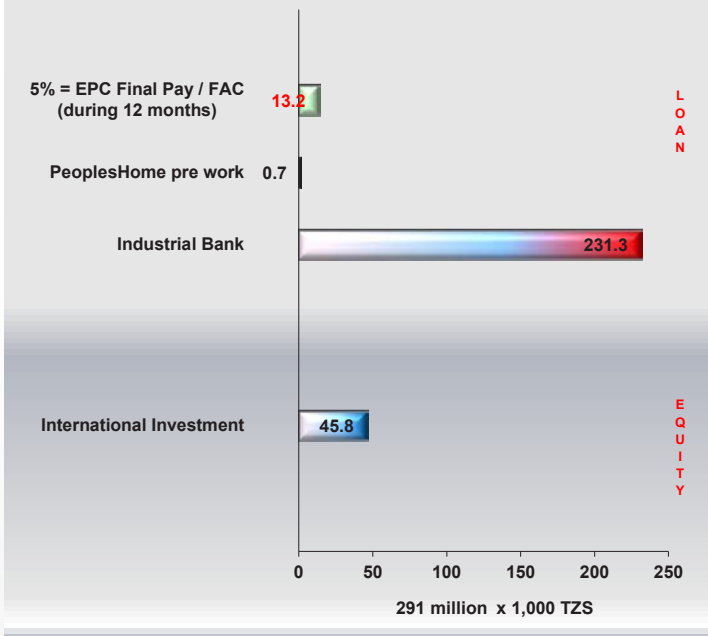
Programmatic carbon income is no part of the financial projections. It is estimated up to 1.9% of the investment cost throughout the entire operating period.



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Tanzania - Capital Sources



Project Driver
NAZURA & PARTNER

Lead Investor
Family Office

Country Investor
National Institution or Entity

Prime Contractor
World Technology Leader

Project Initiator
PEOPLESHOME & Associates

Operator
National Company

Power Purchaser
National Electricity Provider

Rent to Land Owner
Local Municipality

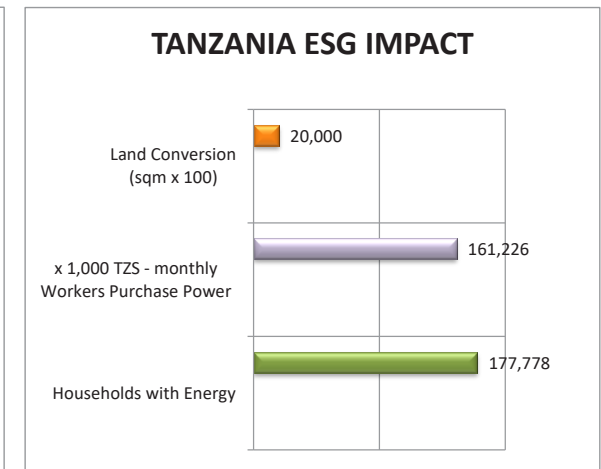
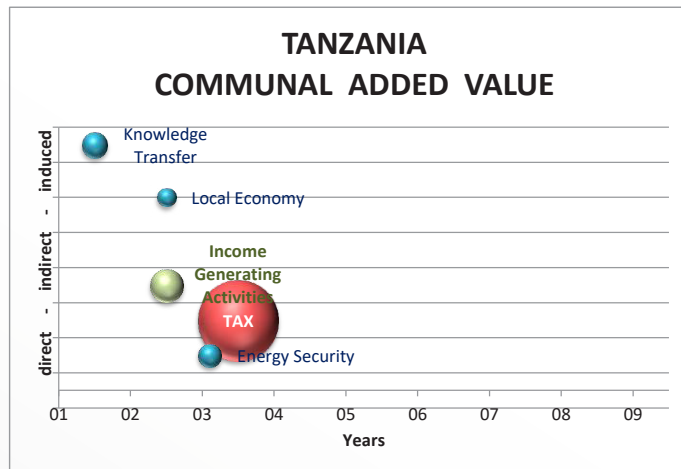
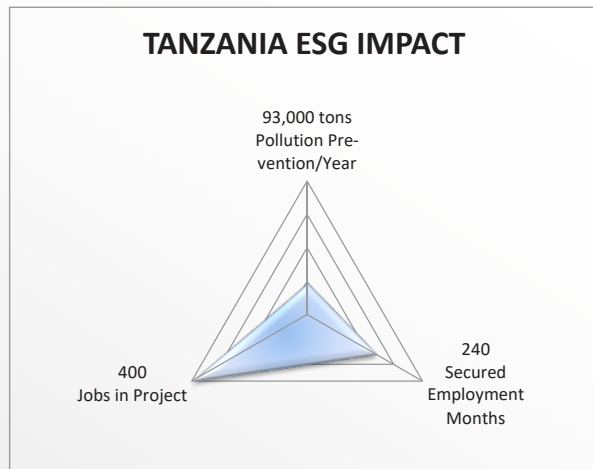
Knowledge Transfer
International University Collaboration

let the Sun/Wind work with you

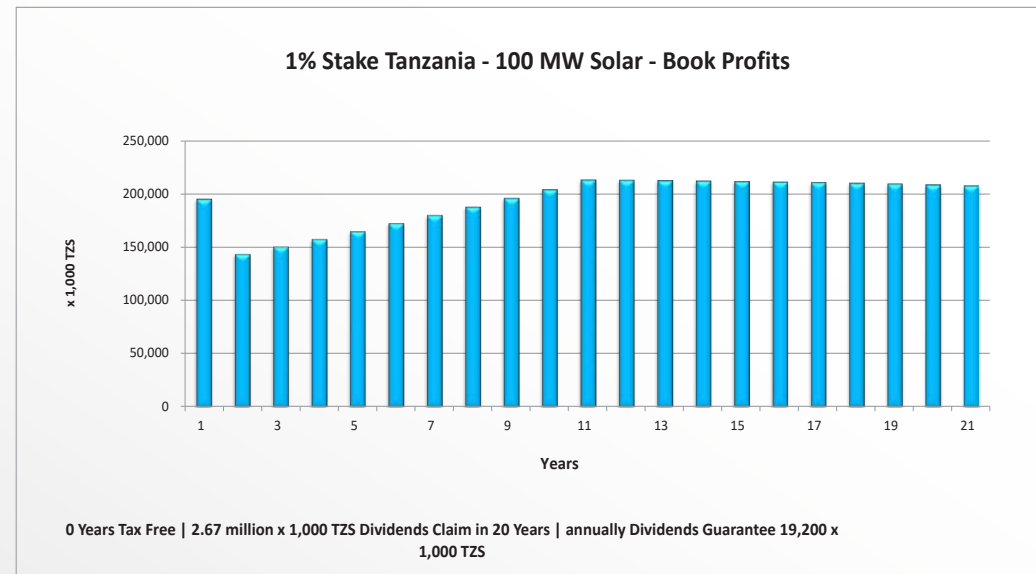


ESG IMPACT & DIVIDENDS

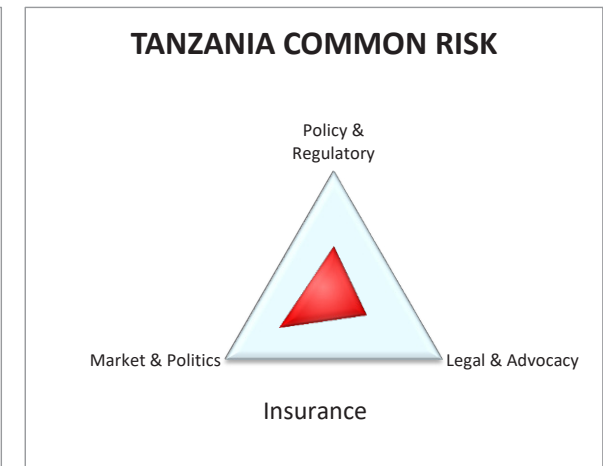
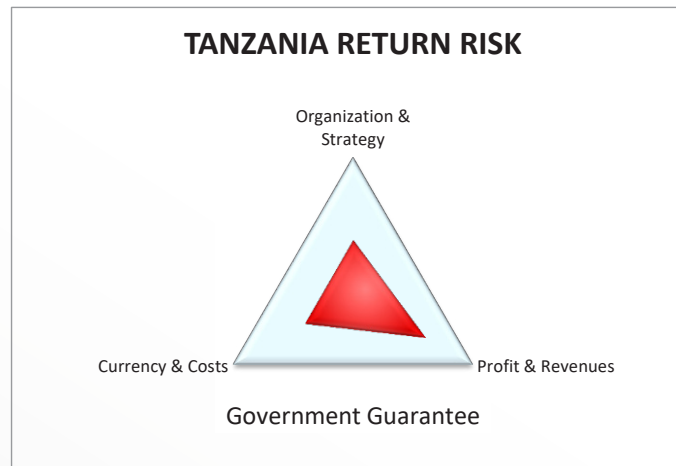
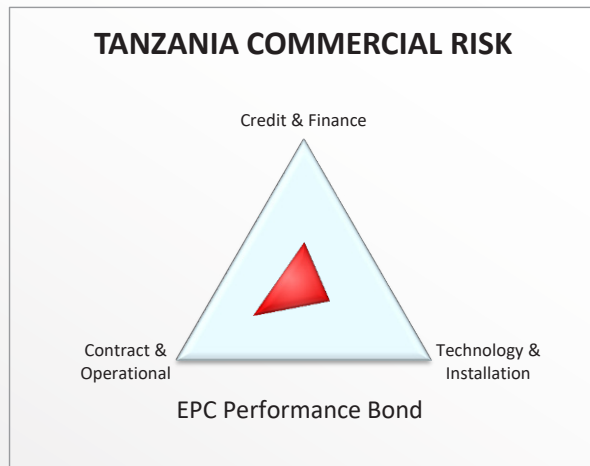
ENVIRONMENT - SOCIAL - GOVERNANCE



Tanzania Invest	290,321,162 x 1,000 TZS
PeoplesHome (pre-work)	671,775 x 1,000 TZS ✓
External Capital	231,273,780 x 1,000 TZS ✓
Private Equity	45,837,349 x 1,000 TZS ✓
Final Pay out of Revenues	13,210,033 x 1,000 TZS ✓
ROI (20 years)	6.3 %
Net Present Value	187,326,207 x 1,000 TZS
Profitability Index	4.1
Price per installed Kilowatt	2,642 x 1,000 TZS
Operating & Maintenance 1% / year	2,113,186 x 1,000 TZS
IRR (20 years)	10.76 %
DSCR	1.25



CRC RISKS & INVESTORS RELATION



ROE
38.9%

NPV
187M TZS

IRR
10.8%

FINANCIAL PROJECTION

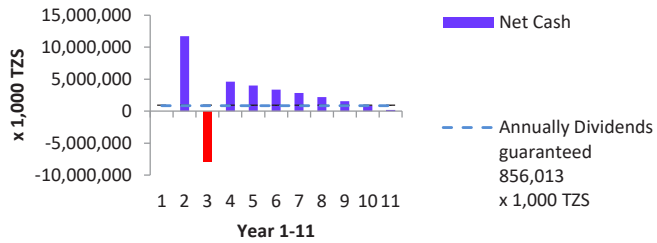
SUMMARY

Tanzania Solar Power Park Total Power 100 MW
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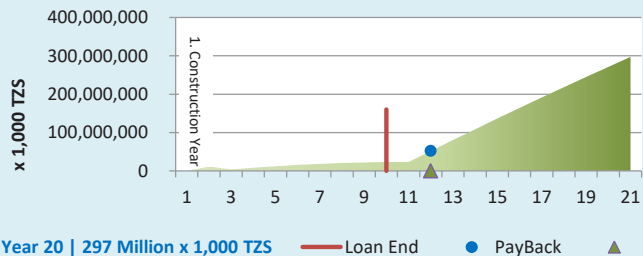
I	Volumes	x 1,000 TZS	1 USD = 2,239.25 TZS	08.17
	Houses (re-investment proposal)	0		F 0
	Renewable Energy	100 MW Solar Power		
	Served Households	177,778 (à 75 Kwh/m)	(160 GWh/Year - Gain 1,600)	
	Village Land	0 ha	2.24 x 1,000 TZS/sqm	
	Land Surface - Solar Power Park	200 ha	0.00 x 1,000 TZS/sqm	
II	Use of Capital	290,321,162 TZS		
			Price per KW Std. - Premium - IDC	
	Technology & Production Machinery	264,200,656 TZS	2642 2836 2903	
	Land	0 TZS		
	* Construction Material Houses	0 TZS		
	* Labour Cost	0 TZS		
	Infrastructure + Labour Cost	0 TZS		
	Management + Fees & IDC	26,120,506 TZS		
	Qualification Budget	0 TZS		
	Social Village Package	0 TZS		
III	Capital Part 2017	277,782,904 TZS	16.1% Projected Equity 10%	
			shares	actual
	PeoplesHome pre-costs	671,775 TZS	15.0%	5 Years 0.2%
	National Loans	0 TZS		0.0%
	International Loans (IR ~4.5%)	231,273,780 TZS		11 Years 86.0%
	National Grants	0 TZS		0.0%
	International Grants	0 TZS		0.0%
	National Investments	0 TZS	20.0%	0.0%
	International Investments	45,837,349 TZS	65.0%	16.1%
	Co-/Interims Investment	0 TZS		0.0%
			100.0%	102.4%
IV	Social Impact	x 1,000 TZS		
	Jobs	400		
	Purchase Power	161,226 TZS	per Month	
V	Common Numbers	x 1,000 TZS		
	Houses per Year (construction)	0		
	House Sale Price	0 TZS		
	Tax to pay per Year	11,711,706 TZS	Average (30% tax rate)	
	Project Locations	1		
	Total Projected Carbon Credits	2,082,662 TZS	extra Income (not in the Finance Scheme)	
	Power Purchase Agreement	0.27 TZS	per Kwh (break even 0.25/ 0.22 x 1,000 TZS)	
	- Tanzania			
	Yearly FIT Progression	0.00 %		
	Electricity Market Price KWh	179.14 TZS	2017	
	Electricity Price Inflation	8.00 %	per Year	
	Tanzania Surplus	598,712,713 TZS	(20 Years)	
	- Net Income Operator	2,113,186 TZS	per Year	
VI	R-O-E + Pre Costs	x 1,000 TZS		
	Feasibility Study	615,794 TZS		
	Working Capital	772,541 TZS		
	R-O-E (NPM 38%), ROI 6.3%	38.9 %		
			365,344,083 x 1,000 TZS Stuttgarter Mod	
			187,326,207 x 1,000 TZS NPV	C 0.6

FINANCIAL PROJECTION

Tanzania 100 MW - Solar Cash & Dividends

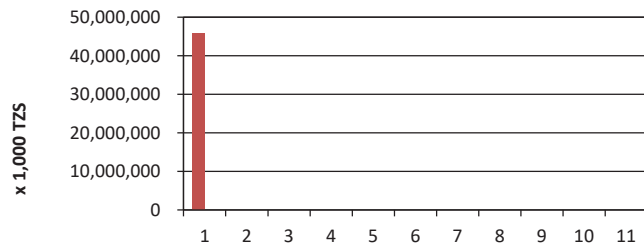


SPV | Tanzania Ending Cash (cumulated)



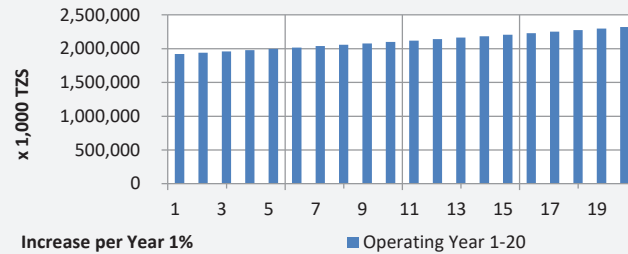
Year 20 | 297 Million x 1,000 TZS

Private Equity



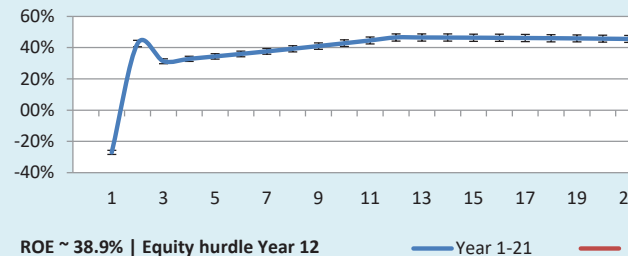
EQ 45.8 Million x 1,000 TZS | 16.1 %

Operating (O&M) Tanzania Turnover 42 Million x 1,000 TZS



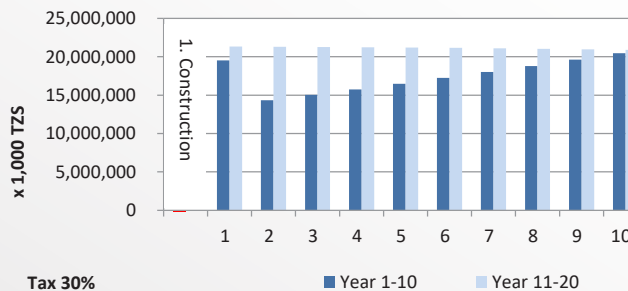
Increase per Year 1%

Return on Equity (ROE) SPV | Tanzania



ROE ~ 38.9% | Equity hurdle Year 12

SPV Tanzania Net Income



Tax 30%

KEY NUMBERS - 2.8.2017|14:11

100 MW Solar 1,600	
Investment	290,321,162 x 1,000 TZS
Equity	45,837,349 x 1,000 TZS
Loan	231,945,555 x 1,000 TZS
Supplier Final Payment	13,210,033 x 1,000 TZS
Sub-payment	0 x 1,000 TZS
Global Interest Rate	4.5 %
Grants	0 x 1,000 TZS
R-O-E 20 years after tax	38.9 %
R-O-I 20 years after tax	6.3 %
NPV 20 years before tax (IR 4%)	187,326,207 x 1,000 TZS
Company Value (Stuttgar Model)	365,344,083 x 1,000 TZS
Guaranteed Pay-out Dividends	4.18 %
Pay Back Period	12 Years
PPA /KWh	0.27 x 1,000 TZS
Fit/PPA Rise Anually	0.00 %
1% Profit Ø per Year	178,209 x 1,000 TZS
1 \$-cent Income PPA/FIT (20 Years)	66,890,876 x 1,000 TZS
Off-taker Power Break Even	Year 7 2024
Tax Exemption	0 Years
Country Surplus in 20 Years	598,712,713 x 1,000 TZS
Nat-Capital : Int'l.-Capital Quote	0 : 1
Equity : Loan Quote	1 : 5.3

FINANCIAL PROJECTION

FINANCIAL ANALYSIS MODEL

ANALYST'S NAME	Dr. Glenn L. Stevens - http://staging-cms.fandm.edu/glenn-stevens
NAME OF COMPANY	Tanzania Solar Power Park Total Power 100 MW

FIRST CALENDAR YEAR OF DATA **2017**

x 1,000 TZS

NUMBER OF YEARS OF DATA **5**

Equity 45,837,349

TANESCO

INCOME STATEMENT

	Start Year	Year 1	Year 2	Year 3	Year 4
Sales Revenue	0	42,993,600	42,692,645	42,391,690	42,090,734
Less: Cost of Goods Sold	0	0	0	0	0
Gross Profits	0	42,993,600	42,692,645	42,391,690	42,090,734
Less: Operating Expenses:					
Operating Expense	0	1,919,431	1,938,624	1,958,009	1,977,589
General / Admin. Exp.	0	0	0	0	0
Lease Expense	0	0	0	0	0
Depreciation Expense	5,685,794	11,144,157	10,698,391	10,270,455	9,859,637
Total Operating Expenses	5,685,794	13,063,588	12,637,015	12,228,464	11,837,226
Operating Profits	(5,685,794)	29,930,012	30,055,630	30,163,226	30,253,509
Less: Interest Expense	6,703,222	10,407,320	9,560,385	8,675,337	7,750,462
Net Profits Before Taxes	(12,389,016)	19,522,692	20,495,246	21,487,888	22,503,046
Less: Taxes	0	0	6,148,574	6,446,367	6,750,914
Net Profit After Taxes	(12,389,016)	19,522,692	14,346,672	15,041,522	15,752,132
Less: Pref. Stock Divds.	0	0	0	0	0
Earnings available for Common Stockholders		19,522,692	14,346,672	15,041,522	15,752,132

BALANCE SHEET

Current Assets:

Cash	0	11,711,706	3,744,657	8,369,509	12,369,277
Marketable Securities	0	0	0	0	0
Accounts Receivable	0	0	0	0	0
Inventories	0	0	0	0	0
Total Current Assets	0	11,711,706	3,744,657	8,369,509	12,369,277
Gross Fixed Assets (at cost):					
Land & Buildings	0	0	0	0	0
Machinery and Equipment	278,603,921	267,459,764	256,761,373	246,490,918	236,631,282
Furniture & Fixtures	0	0	0	0	0
Vehicles	0	0	0	0	0
Other (Inc. Fin. Leases)	0	0	0	0	0
Total Gross Fixed Assets	278,603,921	267,459,764	256,761,373	246,490,918	236,631,282
Less: Accumulated Depreciation	0	0	0	0	0
Net Fixed Assets	278,603,921	267,459,764	256,761,373	246,490,918	236,631,282
Other Assets	0	0	0	0	0
Total Assets	278,603,921	279,171,470	260,506,031	254,860,427	249,000,559

Current Liabilities:

Accounts Payable	0	0	0	0	0
Notes Payable	0	0	0	0	0
Accruals	0	0	0	0	0
Taxes Payable	0	0	0	0	0
Other Current Liabilities	0	0	0	0	0
Total Current Liabilities	0	0	0	0	0
L / T Debt (Inc. Financial Leases)	245,155,587	226,200,445	193,188,334	172,501,208	150,889,208
Total Liabilities	245,155,587	226,200,445	193,188,334	172,501,208	150,889,208
Preferred Stock	0	0	0	0	0
Common Stock !!	33,448,333	52,971,025	67,317,697	82,359,219	98,111,351
Paid-In Capital In Excess of Par	0	0	0	0	0
Retained Earnings	0	0	0	0	0
Total Stockholders' Equity	33,448,333	52,971,025	67,317,697	82,359,219	98,111,351
Total Liab. & Stockholders' Equity	278,603,921	279,171,470	260,506,031	254,860,427	249,000,559

FINANCIAL PROJECTION

100 MW Tanzania	Start Year	Year 1	Year 2	Year 3	Year 4
Number of Common Shares	100	100	100	100	100
End-of-Year Stock Price					
RATIO ANALYSIS					
Current Ratio	no curr. Liabi.	no curr. Liabi.	no curr. Liabi.	no curr. Liabi.	no curr. Liabi.
Quick Ratio	no curr. Liabi.	no curr. Liabi.	no curr. Liabi.	no curr. Liabi.	no curr. Liabi.
Inventory Turnover	no Inventories	no Inventories	no Inventories	no Inventories	no Inventories
Average Collection Period		0.00	0.00	0.00	0.00
Fixed Asset Turnover	0.00	0.16	0.17	0.17	0.18
Total Asset Turnover	0.00	0.15	0.16	0.17	0.17
Debt Ratio	0.88	0.81	0.74	0.68	0.61
Debt-to-Equity	7.33	4.27	2.87	2.09	1.54
Times Interest Earned		2.88	3.14	3.48	3.90
Gross Profit Margin		100.00%	100.00%	100.00%	100.00%
Operating Profit Margin		69.62%	70.40%	71.15%	71.88%
Net Profit Margin		45.41%	33.60%	35.48%	37.42%
Return on Total Assets (ROA)		6.99%	5.51%	5.90%	6.33%
Return on Equity (ROE)		42.59%	31.30%	32.81%	34.37%
Earnings Per Share		195,227	143,467	150,415	157,521
IPT Tanzania - 20%		3,904,538	2,869,334	3,008,304	3,150,426
Price/Earnings Ratio					
DUPONT ANALYSIS					
Net Profit AT/Sales		45.41%	33.60%	35.48%	37.42%
Sales/Total Assets	0.00%	15.40%	16.39%	16.63%	16.90%
ROA		6.99%	5.51%	5.90%	6.33%
Net Profit AT/Total Assets	0.00%	6.99%	5.51%	5.90%	6.33%
Total Assets/Stockholders' Equity	832.94%	527.03%	386.98%	309.45%	253.79%
ROE	0.00%	36.86%	21.31%	18.26%	16.06%

STATEMENT OF CASH FLOWS

CASH FLOW FROM OPERATING ACTIVITIES					
Net Profit after Taxes		19,522,692	14,346,672	15,041,522	15,752,132
Depreciation		11,144,157	10,698,391	10,270,455	9,859,637
Decrease in Accts. Receiv.		0	0	0	0
Decrease in Inventories		0	0	0	0
Decrease in Other Assets		0	0	0	0
Increase in Accounts Pay.		0	0	0	0
Increase in Accruals		0	0	0	0
Increase in Taxes Payable		0	0	0	0
Increase in Other Cur. Lia.		0	0	0	0
Cash Flow from Oper. Act.		30,666,849	25,045,063	25,311,977	25,611,769
CASH FLOW FROM INVESTMENT ACTIVITIES					
Increase in Gross Fixed Assets		11,144,157	10,698,391	10,270,455	9,859,637
Cash Flow from Investments		11,144,157	10,698,391	10,270,455	9,859,637
CASH FLOW FROM FINANCING ACTIVITIES					
Increase in Notes Payable		0	0	0	0
Increase in Long-Term Debt		(18,955,143)	(33,012,111)	(20,687,126)	(21,612,000)
Changes in Stockholders' Equity		19,522,692	14,346,672	15,041,522	15,752,132
Preferred Dividends Paid		0	0	0	0
Common Dividends Paid		0	0	0	0
Cash Flow from Financing Activities		567,549	(18,665,439)	(5,645,604)	(5,859,868)
Net Incr. in Cash / Mark. Securities		42,378,554	17,078,014	29,936,828	29,611,538