



RENEWABLE ENERGY

For

SUSTAINABILITY

What are the purposes of energy conservation and renewable energy?

Energy Impacts the Entire Community

- Affordability (all incomes and family types)
- Employment and job access
- Public services
- Cultural relevance
- Environment

- Is the community durable?
 - Infrastructure
 - Housing (homeownership and rental)
 - Long term operation,
 - Maintenance
 - Sources of funds

Housing

Balancing Cash Flows

- Development Costs & Operating Expenses
 - Water and energy conservation
 - Long term maintenance
- Income and Operation
 - Fee or subsidized (housing and services)
- Development Costs and Debt Service

1. EFFECTIVE GROSS INCOME	
A. Sch Residential Rents	
B. Rent Subsidy	
C. Less Vacancy/Bad Debt	-
Total Effective Gross Income	a
2. OPERATING EXPENSES	
C. Vehicle/Travel	
D. Gas & Electric	
E. Water & Sewer	
H. Waste Removal	
J. Repair	
K. Maintenance	
L. Grounds & Decorating	
P. Equipment (Street lights & Misc)	
R. Snow Removal	
Total Operating Expenses	b
4. RESERVES	
A. Replacement Reserves	
B. Operating Reserve	
C. Other:	
Total Reserves	c
5. TOTAL RESERVES & EXPENSES	b+c
6. NET INCOME	a-b-c
7. ANNUAL DEBT SERVICE	d
CASH FLOW	a-b-c-d

Why Leverage

- Increases funds by tapping into new sources
- Build more for current costs are lower than future costs
- Permits variety
- Creates market relationships

Title VI Leveraged Funds

Eligible projects may include:

- Real property acquisition
- Site improvement
- Development of utilities
- Conversion
- Demolition
- Financing
- Administration and planning

How Does Title VI Work?

The borrower leverages IHBG funds to obtain a financing by:

- Pledging current and future IHBG funds to HUD as security for a loan guarantee. (Pledged funds are still available for use until there is a payment default.)
- Loan guarantee is up to 5 X Need portion of their annual allocation with a maximum term of 20 years.
- HUD guarantees 95% of the outstanding principal and interest of the loan
- Land is not used for collateral.
- No guarantee fee

Title VI Characteristics

Must meet IHBG requirements including:

- An eligible affordable housing activity
- Serve low and moderate income
- Costs should not exceed the Total Development Cost limitations

Must meet loan requirements including:

- **Comply with lender's loan terms**
- Pay principal and interest

Whole Community

Chamai Center in McGrath Alaska

- The original building was destroyed by fire in 2007. The original plan was to use IHBG and insurance funds for a \$706,000 replacement.
- Under the new plan, there will be offices, activity center and kitchen. Consolidating health, social services and safety programs minimize operating and maintenance costs and generate income.
- Project costs increased to \$3,633,000.

McGrath Native Village Council Interior Regional Housing Authority

Title VI	\$633,240
ICDBG	\$600,000
ARRA Stimulus	\$43,042
IHBG	\$296,351
Insurance	\$518,000
Council Savings	\$225,087
AK Grants	\$650,000
City of McGrath CDBG	\$850,000
Total	\$3,815,720
Funding over costs	\$182,360

Chilkoot Indian Association

Alternative Energy Source for 8 units

Title VI	\$700,000
ICDBG	\$600,000
ARRA	\$822,000
IHBG	\$ 2,000
Alaska Energy Authority	\$ 179,000
Total	\$ 2,303,000

Sustainability

Improve Energy Efficiency

- Building Design
 - Energy Star Rating
 - Appliances
 - Passive Solar
 - Lighting (Buildings and Public Spaces)
 - Insulation
 - Heating and Air Systems



Kotzebue

Replacement of Homeownership Units that are

- Unsafe
- Too expensive to operate
- “too dilapidated for rehabilitation”

Replacement Housing (60% reduced operating costs)

- Same site to reduce costs
- R 40 in walls & R 60 in floors
- LED Lighting
- Efficient hot water & heating

Pleasant Point Passamaquoddy

- ❖ In-floor radiant heat
- ❖ Compact fluorescent lamps
- ❖ Energy efficient appliances & windows
- ❖ Low VOC paints, glazes, adhesives
- ❖ Solar panels on roof provide heat and hot water to each unit

Pleasant Point Passamaquoddy Tribe of Maine

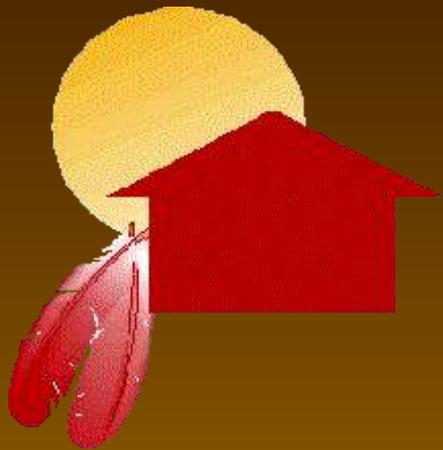
Preparation of Foundation for Radiant Heat Flooring



Sources of Funding

Source	Construction	Permanent
Title VI	\$ 870,000	\$ 0
ARRA*	\$ 1,530,000	\$ 0
USDA Grant	\$ 615,000	\$ 0
FHLB Boston *	<u>\$ 400,000</u>	<u>\$ 400,000</u>
Total	\$3,015,000	\$ 400,000

* Used to curtail the Title VI Loan.



For further information:



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