

MSU Energy Performance Contracting Phase 1 Summary												
Project Name	Project Type	Est Construction Start Date	Construction Cost Est. (\$)	Identified Funding		Total Funds Not Identified (\$)	Payback Est.	20-yr Energy Savings Est. (\$)	% Energy Funded	Funding Gap (\$)	Deferred Maintenance Retirement	
				Amount (\$)	Source						%	Amount (\$)
September 2024 BOR Request												
Lighting/Water Conservation												
Lighting												
Indoor Lighting Retrofits	Energy Savings, Deferred Maint.	Q1 2025	\$ 9,000,000	\$ 500,000	Utility Rebate	\$ 8,500,000	20 yrs	\$ 7,500,000	80%	\$ 1,000,000	75%	\$ 6,750,000
Water Conservation												
Plumbing Fixture Retrofits	Energy Savings, Deferred Maint.	Q1 2025	\$ 1,000,000	\$ -	\$ -	\$ 1,000,000	< 10 yrs	\$ 1,940,000	190%	\$ -	70%	\$ 700,000
Conservation Subtotal			\$ 10,000,000	\$ 500,000	Rebates	\$ 9,500,000	< 20 yrs	\$ 9,440,000	90%	\$ 1,000,000	70%	\$ 7,450,000
Building Mechanical Systems												
Barnard Hall												
Lab Airflow/Exhaust Upgrades	Deferred Maint, Safety	Q1 2025	\$ 2,250,000	\$ -	-	\$ 2,250,000	20 + yrs	\$ 950,000	40%	\$ 1,300,000	100%	\$ 2,250,000
Cooling System Upgrades	Energy Savings, Deferred Maint.	Q2 2025	\$ 250,000	\$ -	-	\$ 250,000	16 - 20 yrs	\$ 350,000	140%	\$ -	100%	\$ 250,000
Chemistry Building												
Lab Airflow/Exhaust Upgrades	Deferred Maint, Safety	Q3 2025	\$ 3,500,000	\$ 3,500,000	Research Funded	\$ -	+ 20 years	\$ 1,000,000	20%	\$ -	70%	\$ 2,450,000
Plant Growth Center												
Chilled & Condenser Water System Upgrades	Deferred Maint.	Q2 2025	\$ 8,500,000	\$ -	-	\$ 8,500,000	20 + yrs	\$ 2,400,000	20%	\$ 6,100,000	100%	\$ 8,500,000
Air Handling System Optimization & Upgrades	Energy Savings, Deferred Maint.	Q3 2025	\$ 4,000,000	\$ -	-	\$ 4,000,000	< 20 yrs	\$ 600,000	10%	\$ 3,400,000	100%	\$ 4,000,000
Greenhouse Upgrades	Deferred Maint.	Q2 2025	\$ 1,500,000	\$ -	-	\$ 1,500,000	< 20 yrs	\$ 300,000	20%	\$ 1,200,000	100%	\$ 1,500,000
Mechanical Subtotal			\$ 20,000,000	\$ 3,500,000		\$ 16,500,000	20 + yrs	\$ 5,600,000	20%	\$ 12,000,000	90%	\$ 18,950,000
Heat Plant												
Surge Tank Replacement	Deferred Maint.	Q2 2025	\$ 1,000,000	\$ -	-	\$ 1,000,000	+ 20 years	\$ 500,000	50%	\$ 500,000	100%	\$ 1,000,000
Emergency Generator Replacement	Deferred Maint.	Q1 2026	\$ 2,500,000	\$ 1,000,000	PPA 18-2105 Fund 46P867	\$ 1,500,000	+ 20 years	\$ -	0%	\$ 1,500,000	100%	\$ 2,500,000
Backup Propane System Upgrade	Deferred Maint.	Q2 2026	\$ 2,000,000	\$ -	-	\$ 2,000,000	+ 20 years	\$ -	0%	\$ 2,000,000	100%	\$ 2,000,000
Boiler Upgrades	Deferred Maint.	Q2 2026	\$ 10,000,000	\$ -	-	\$ 10,000,000	+ 20 years	\$ 2,500,000	20%	\$ 7,500,000	100%	\$ 10,000,000
Natural Gas System Upgrades	Deferred Maint.	Q2 2026	\$ 500,000	\$ -	-	\$ 500,000	+ 20 years	\$ -	0%	\$ 500,000	100%	\$ 500,000
Feedwater System Upgrades	Deferred Maint, Energy Savings	Q2 2025	\$ 500,000	\$ -	-	\$ 500,000	+ 20 years	\$ -	0%	\$ 500,000	100%	\$ 500,000
Condensate System Upgrades	Deferred Maint, Energy Savings	Q2 2025	\$ 500,000	\$ -	-	\$ 500,000	20 yrs	\$ 500,000	100%	\$ -	100%	\$ 500,000
Heat Plant Subtotal			\$ 17,000,000	\$ 1,000,000		\$ 16,000,000	20 + yrs	\$ 3,500,000	20%	\$ 12,500,000	100%	\$ 17,000,000
PHASE 1 TOTAL			\$ 50,500,000	\$ 5,000,000		\$ 45,500,000	20 + yrs	\$ 22,040,000	40%	\$ 25,500,000	80%	\$ 43,400,000
May 2024 BOR Approved												
Campus Energy Districts & Geothermal Fields												
South Campus Tunnel Piping & Pumping	Infrastructure	Q3 2025	\$ 3,500,000	\$ -	-	\$ 3,500,000	20 + yrs	\$ 3,500,000	100%	\$ -	-	-

**List includes currently defined projects, costs and savings estimates. List is intended to be a living document as the EPC process proceeds.