

Executive summary of podway project for
Cavite with cities, Philippines

New sustainable infrastructure
Tollway with integrated solar, wind, storage, EV charging, and utilities.

A vertically-integrated automated tollway for moving people and goods. Podway built alongside roadways and highways within public right-of-way easements. Includes a renewable energy grid with battery-backed solar and wind generation, on-street EV charging, and utilities.

Finance • Build • Own • Operate (FBOO)



Financial Summary - details on page 3-6

Project Cost (CAPEX) \$5.0B

\$2.8M per route-km
 \$1,157 per resident cost

Annual Revenue \$7.4B

Multiple long-term contracts and revenue streams from passengers, renewables, advertising, freight, parcels, carbon credits, and attachment fees.

Operating Expenses (OPEX) \$2.1B

Rev share, monitor, security, clean, maintain

Net Operating Income \$4.2B

Multiple scenarios and metrics on page 4



Project Details

Length: 1,781 km

Guideway with stainless steel exterior, aluminum rails, galvanized steel supports at 24 m (79 ft) spacing. Expected 100 year lifespan.

Number of Vehicles: 29,760

Automated, on-demand, battery-electric pods can carry 4 seated passengers or 1400 kg (1.5 ton) pallet-sized payload.

Number of Access Points: 17,810

Access points (pod stops) are electric lifts that lower pods to ground-level for boarding off the main line.

Serves all major destinations including: Airport(s), Train station(s), Bus terminal(s), Hospitals, Schools, Places of worship, Tourist sites, Grocery stores, Retail, Residential, Freight hubs, Industrial, Distribution centers, and Seaports.

Population served: 3.5M

72 km/h (45 mph) non-stop. Convenient to population of 3,475,863. Integrates with existing travel modes. Provides car-like convenience and train-like capacity.

Renewable Energy System: 424.8 MW

425 MW generation of clean and renewable energy. GHG reduction of 1M tCO2e per year.

Status and Milestones

- First Pilot** Installed & testing (Boston 2021)
- Feasibility study** Completed
- Funding** Partial (see page 5)
- Insurance & Bonding** Have commitment
- Rights-of-Way agreement** TBD
- Route approved** TBD
- EPC selected** 01/2024
- First phase Permitted** 02/2024
- On-site Pilot installed** 04/2024
- Concession Signed** 04/2024
- Financial close** 04/2024
- First phase operational** 10/2024
- Full system operational** 06/2025

Additional Info

- [Public webpage for Philippines](#)
- [Request feasibility study](#)



Feasibility Study and Industry Comparables

Feasibility Study Summary

- ✓ **Financial:** Multiple sources of revenue, long-term contracts and network effects deliver durable cash flows and high margin operations.
- ✓ **Regulatory:** International Automated People Mover standards for system safety.
- ✓ **Land acquisition:** None. Installed within public rights-of-way (RoW) alongside roadways within utility-like aerial easements.
- ✓ **Government:** Provides aerial RoW easements through long-term concession agreement. Strong government support from revenue stream and no government funding. Provides public transport that is convenient, inclusive, accessible, sustainable, and equitable. No land use or negative impact on other modes of travel. Lowers gov't cost for road & bridge maintenance.
- ✓ **Construction:** 90% of work is competitively bid on fixed-price contracts with qualified and reputable firms. Infrastructure is built in factory which makes for fast installation and low disruption.
- ✓ **Environmental:** No significant environmental impact. Carbon negative. Pollution free. Powered by clean and renewable energy
- ✓ **Societal:** Fast to build and not disruptive. Improved safety, reduced crime. Creates jobs and economic growth. Eliminates congestion & parking issues. Integrates with existing transport.
- ✓ **Technical:** Exclusive, elevated, fully-automated guideway avoids complexities of multi-modal roadway. Similar to systems that have been safely operating for 45+ years. See box to right →

Podway vs. ATN/PRT

Automated Transit Networks
Personal Rapid Transit

- No land use:** podways go alongside existing roads use low-cost stops to enter pods at ground level.
- Low cost:** mass production of civil infrastructure
- Goods:** automated transport of freight and packages
- Utilities:** integrates utility lines & street lighting
- Energy:** solar & wind on podway generate distributed renewable energy & storage to sell.
- High capacity:** 6-pod trains every second carry 86,400 seats/hr. Pod lifts can handle any loading demand.
- High speed:** 242 km/h (150 mph) over long distances
- Convenience:** road-like network with stops on every block achieve car-like convenience and availability.

Operational ATN/PRT Systems

Location	Name and Vendor	Route (km)	Vehicles	Service Year
Morgantown, West Virginia	Morgantown PRT	5.8	70	1975
London Heathrow Airport	ULTra	3.8	21	2011
Masdar City, UAE	2getthere	1.8	10	2010
Suncheon, South Korea	Vectus	4.6	40	2014
Raytheon, Massachusetts (tested)	PRT 2000	1.5	3	1995-1997

CONFIDENTIAL

Prepared for Md Alamgir Hossain Sunny under NDA
This copy embeds unique watermarks for tracking purposes.

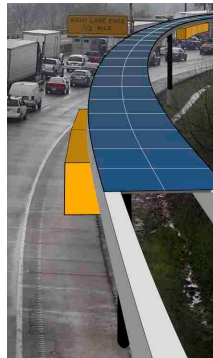
Cavite with cities, Philippines Solar Podway Project Feasibility Study

For lenders and equity investors to conduct due diligence and analyze business, financial, and technical feasibility of a podway project.

Executive SummaryPage 1

Chapters

1. PROJECT OVERVIEW	6
2. MARKET	8
3. FARES	15
4. RIDERSHIP	17
5. FINANCIALS	19
6. RIGHTS-OF-WAY	23
7. ENVIRONMENTAL	25
8. SAFETY	29
9. REGULATORY	31
10. STAKEHOLDERS	32
11. MANAGEMENT	35
12. EMPLOYMENT	37
13. ROUTE	38
14. PROJECT COSTS	42
15. TIMELINE	43
16. DEVELOPMENT PHASE	44
17. DESIGN PHASE	45
18. CONSTRUCTION PHASE	46
19. SYSTEM	51
20. CIVIL WORKS	58
21. ELECTRICAL & MECH WORKS	67
22. ROLLING STOCK	71
23. UTILITY	75
24. ENERGY	76
25. RESILIENCY	79
26. CAPACITY	80
27. OPERATIONS	81
28. INSURANCE	88
29. RISKS	89



APPENDIX

A. Travel Mode Table	96
B. Competition Matrix	97
C. System Table	98
D. Regional Table	99
E. Environmental Impact Table	100
F. Passenger Fare Table	101
G. Financial Table	102
H. Similarity to Other Systems	103
I. Employment Table	104
J. Project Table	105
K. Capacity Table	106
L. Revenue Share Table	106
M. Right-of-way Easement Envelope	107
N. Energy Generation and Storage	108
O. Impact and Resources	108

Related podway projects

Barishal, Bangladesh: In Development Phase. AECOM providing program management. Local firm preparing route survey and environment impact study.

Pilot: Installed in Oct 2021 in Massachusetts, USA and is undergoing testing.

Government commitments

for 8+ countries in Africa, Asia, and North America

Feasibility Study and Industry Report available upon request.

Raelor Capital

Executive Summary
The On-demand Transportation Solution
PRT is a Potential \$31-58 Billion
Investment Gain Opportunity

Personal Rapid Transit (PRT) Research

Project Details

Partners and Major Contracts

Project Developer Transit X

Engineering Capgemini

Financial partner Podway Development

Financial advisor EACP

Accounting / CPA one of Big 4

Concession Agreement Gov't (or private)

Program Management AECOM

Bankable Study KPMG/PwC/EY

Insurance Lloyds of London

Civil Works Competitive bid

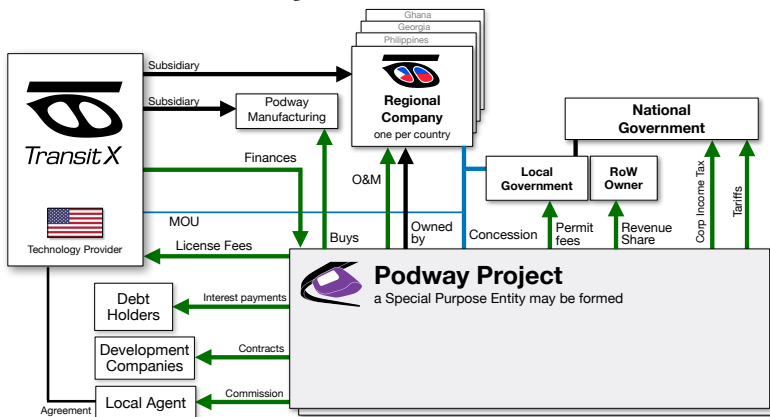
Energy Systems Competitive bid

Manufacturing Multiple contracts

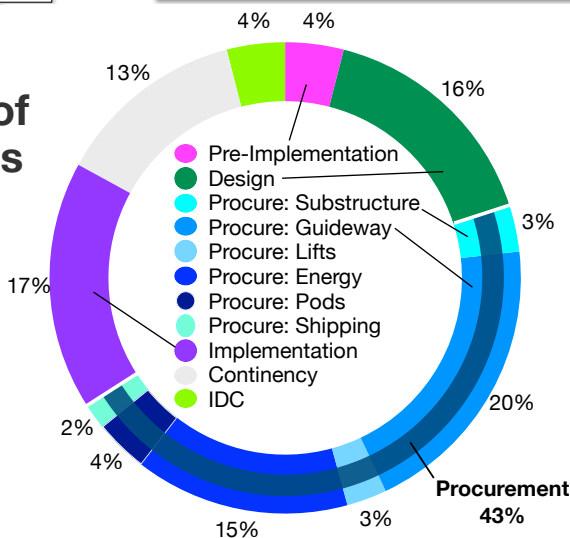
Use of Funds

Task item	Cost (US\$)
1 DEVELOPMENT: 3 to 9 months	\$201.1M
2 Feasibility Study with Ridership-Rev Study	14,079,000
3 Environmental Impact Study	42,236,000
4 Pilot	32,180,000
5 Civil planning & assessment	52,293,000
6 Contracts, Documentation & Legal	18,101,000
7 Project Management	16,090,000
8 Travel & Meetings	6,034,000
9 Contingency for Development Phase	20,113,000
10 IMPLEMENTATION / EPC	\$4.8B
11 DESIGN: 3 to 6 months duration	804,505,000
12 Financing fees	144,811,000
13 Contracts & Legal	48,270,000
14 Commission fee	146,451,228
15 Civil Design	144,811,000
16 Transport Design	104,586,000
17 Utility Design	96,541,000
18 Permitting & Approvals	56,315,000
19 Owner's Engineer and Rep	72,405,000
20 Project Management (through construction)	80,451,000
21 Independent Engineering Consultant	32,180,000
22 PROCUREMENT	2,312,953,056
23 Substructure (vertical supports)	161,907,000
24 Superstructure (guideway)	994,570,000
25 Pods (vehicles)	185,036,000
26 Lifts	138,777,000
27 Solar & Wind generation	717,015,000
28 Battery packs (energy storage)	23,130,000
29 Shipping & Tariffs	92,518,000
30 INSTALLATION: 12 to 18 month duration	\$854.8M
31 Insurance & Bonding	17,095,740
Civil Structures (Podway)	393,202,000
32 Site work	39,320,000
33 Utility diversions	125,825,000
34 Foundations	98,301,000
35 Erection (labor + equipment)	117,961,000
36 Inspections and Certifications	11,796,000
Rolling Stock (Pods & Lifts)	282,080,000
37 Installation & Commissioning	112,832,000
38 Testing & Safety Certification	124,115,000
39 Documentation & Training	45,133,000
Facilities	85,479,000
40 Pod cleaning facilities	17,096,000
41 Repair & maintenance facilities	17,951,000
42 Pod parking garage	20,515,000
43 Control room	29,918,000
Energy Systems	76,931,000
44 Installation	61,544,800
45 Utility Interconnects	15,386,200
50 Other	856,973,155
51 15% Contingency	65,846,802
52 Interest During Construction	201,126,353
53 TOTAL PROJECT COSTS	\$5.0B

Project Structure



Use of Funds



Business model

Operate tollway and collect fees for passenger trips, freight, and parcels. In pod direct marketing/advertising.

Renewable energy generation with storage. Utility attachment fees.

Concession Agreement with Government

- Easement rights-of-way for 5% share of revenue
- Guaranteed minimum usage by government
- Minimum 30 yr term with extension or removal at end
- A common carrier with social benefit
- Can sell and distribute renewable energy
- No land ownership
- Local content %, Job transition programs
- Clear tender process & reasonable import tariffs
- Formula for setting majority of fares.
- Utility integration with attachment fees
- Service quality levels, capped liability, safety program
- Ability to move project funds into and out of the country

Financial Strengths

- **Predictable revenue** from long-term contracts and multiple revenue streams, including PPA.
- **Durable High Margins** from long-term contracts, network effects, high barriers to entry, a platform business model, a vertically integrated system, and exclusivity.
- **Fixed price & time construction** installation of factory-built light civil infrastructure. Phased roll-out.
- **Low CAPEX** and competitive with rebuilding a roadway or transition to electric vehicles. Lightweight vehicles and loads enable low cost civil structures. Rapid construction reduces interest on debt.
- **Low OPEX** because no driver cost, no fuel cost, low maintenance and repair costs, low marketing costs
- **Low fixed OPEX** over 75% of expenses are variable and proportional to revenue.
- **Sustainable/Equitable** Clean energy and transport delivers superior ESG/SDG/Triple-bottom line
- **Proven tech** Comparable systems have been operating safety for 40+ years in US. Fixed price contracts.

Financial Projections

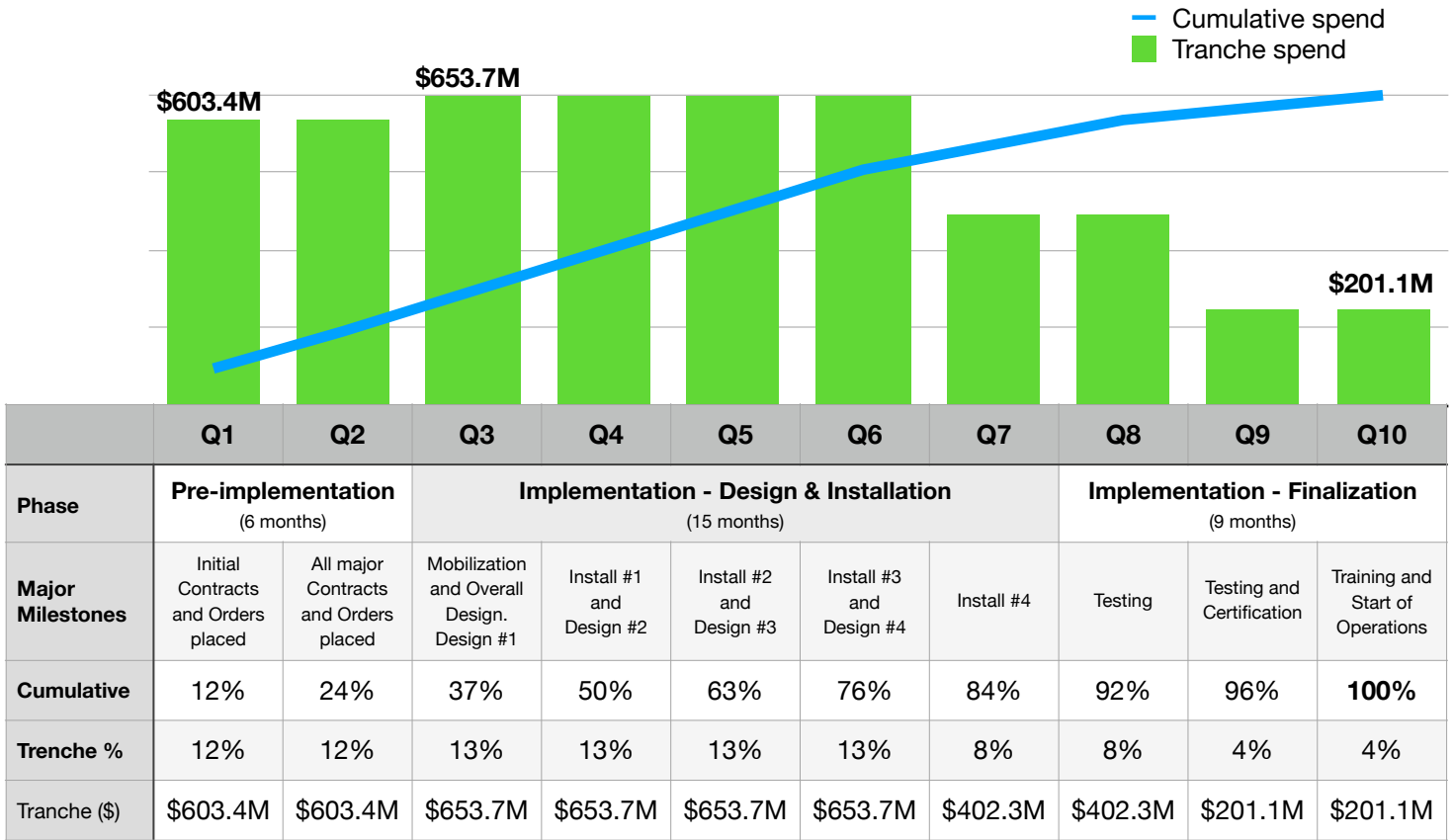
	Expected	50% less passenger trips	50% less passenger trips & 50% less freight trips
Project cost / CAPEX	\$5.0B	\$5.0B	\$5.0B
NET REVENUE	\$7.4B	\$5.6B	\$3.9B
Passenger fares	\$3.6B	\$1.8B	\$1.8B
Long-term guaranteed contracts (est.)	\$177.6M	\$88.8M	\$88.8M
Daily trips (% mode share)	2,778,476 (43%)	1,389,238 (21%)	1,389,238 (21%)
Avg. revenue per trip: \$	\$3.50		
Revenue per vehicle	\$249,001		
Advertising	\$98.7M	\$49.3M	\$49.3M
per hour per passenger	\$0.62		
Freight & Parcels	\$3.4B	\$3.4B	\$1.7B
Long-term guaranteed contracts (est.)	\$241.2M	\$241.2M	\$120.6M
Energy	\$72.8M	\$72.8M	\$72.8M
\$/MWh (\$/GJ)	\$30		
EV & Carbon Credits	\$151.8M	\$151.8M	\$151.8M
per tCO _{2e}	\$120		
Attachment fees	\$89.9M	\$89.9M	\$89.9M
OPEX	\$2.1B	\$1.6B	\$1.2B
Revenue share payments	\$370.5M	\$279.3M	\$193.1M
Operations & Maintenance, SG&A	\$1.5B	\$1.1B	\$772.5M
Depreciation / Reserve	\$251.4M	\$251.4M	\$251.4M
EBIT	\$5.3B	\$3.9B	\$2.6B
Interest Payment	\$338.9M	\$338.9M	\$338.9M
Net Operating Income (NOI)	\$4.2B	\$3.1B	\$2.0B
Gross Margin (OPEX/Revenue)	72%	70%	68%
NOI / Project cost ratio	0.84	0.61	0.39
Breakeven Revenue	26%		
Return of Capital	3.1 years		
DSCR	Year 1: 4.92 Year 5: 16.40		
Cash-Flow-to-Debt Ratio	1.00		
Valuation at year 5 (with P/E ratio of 4)	\$29.6B (29.5 times initial equity)		
Project's IRR	57%		

10-year Pro Forma

Dollar values in thousands USD ('000)

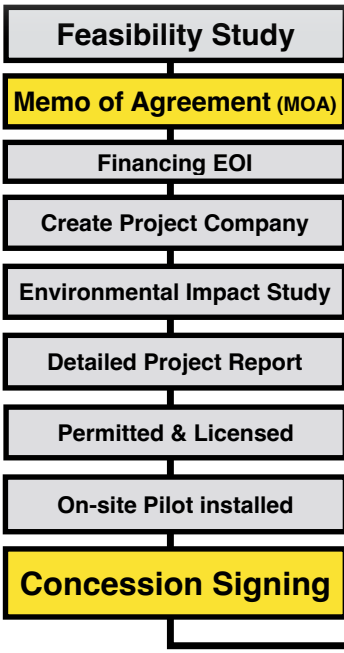
Years ►	0	1	2	3	4	5	6	7	8	9	10
1 INCOME STATEMENT											
2 Net Revenues	\$ 0	\$ 2,223,079	\$ 3,112,311	\$ 4,357,235	\$ 6,100,129	\$ 7,410,264	\$ 7,410,264	\$ 7,410,264	\$ 7,410,264	\$ 7,410,264	\$ 7,410,264
3 <i>% of steady-state revenue</i>	0%	30%	42%	59%	82%	100%	100%	100%	100%	100%	100%
4 Operating Costs	\$ 0	555,770	778,078	1,089,309	1,525,032	2,114,030	2,114,030	2,114,030	2,114,030	2,114,030	2,114,030
5 Revenue Share Payments	\$ 0.00	111,154	155,616	217,862	305,006	370,513	370,513	370,513	370,513	370,513	370,513
6 Operations & Maintenance, SG&A	\$ 0	444,616	622,462	871,447	1,220,026	1,482,053	1,482,053	1,482,053	1,482,053	1,482,053	1,482,053
7 Depreciation / Reserve	\$ 0	0	0	0	0	261,464	261,464	261,464	261,464	261,464	261,464
8 EBIT	\$ 0	1,667,309	2,334,233	3,267,926	4,575,097	5,296,234	5,296,234	5,296,234	5,296,234	5,296,234	5,296,234
9 Interest Payment	\$ 338,917	\$ 338,917	\$ 338,917	\$ 338,917	\$ 338,917	\$ 338,917	\$ 338,917	\$ 338,917	\$ 338,917	\$ 338,917	\$ 338,917
10 Taxes	\$ 0	199,259	299,297	439,351	635,427	743,597	743,597	743,597	743,597	743,597	743,597
11 Net Operating Income (NOI)	\$ (338,917)	1,129,134	1,696,019	2,489,658	3,600,753	4,213,719	4,213,719	4,213,719	4,213,719	4,213,719	4,213,719
12 BALANCE SHEET											
13 Total Assets	\$ 5,124,767	5,142,684	5,167,769	5,202,887	5,229,285	5,229,285	5,229,285	5,229,285	5,229,285	5,229,285	5,229,285
14 Cash & Marketable Secur. (BOP)											
15 Fixed Assets (acquisition cost)	\$ 5,124,767	5,142,684	5,167,769	5,202,887	5,229,285	5,229,285	5,229,285	5,229,285	5,229,285	5,229,285	5,229,285
16 Depreciation	\$ 256,238	257,134	258,388	260,144	261,464	261,464	261,464	261,464	261,464	261,464	261,464
17 Accumulated Depreciation	\$ 256,238	513,373	771,761	1,031,905	1,293,370	1,554,834	1,816,298	2,077,762	2,339,226	2,600,690	2,862,155
18 Total Liabilities	\$ 4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653
19 Debt	\$ 4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653	4,223,653
20 Equity	\$ 1,005,632	2,134,765	3,830,784	6,320,442	9,921,195	14,134,914	18,348,633	22,562,352	26,776,071	30,989,790	35,203,510
21 Capital	\$ 1,005,632	1,005,632	1,005,632	1,005,632	1,005,632	1,005,632	1,005,632	1,005,632	1,005,632	1,005,632	1,005,632
22 Retained Earnings	\$ 0	1,129,134	2,825,152	5,314,810	8,915,563	13,129,282	17,343,002	21,556,721	25,770,440	29,984,159	34,197,878
23 CASH FLOW											
24 Free Cash Flow	\$ (5,124,767)	1,649,392	2,309,149	3,232,808	4,548,698	5,557,698	5,557,698	5,557,698	5,557,698	5,557,698	5,557,698
25 Cash From Operations	\$ 0	1,667,309	2,334,233	3,267,926	4,575,097	5,557,698	5,557,698	5,557,698	5,557,698	5,557,698	5,557,698
26 Increases in Working Capital	\$ 0	0	0	0	0	0	0	0	0	0	0
27 CAPEX	\$ 5,124,767	17,917	25,084	35,118	26,398	0	0	0	0	0	0
28 Fixed Infrastructure	\$ 4,185,456	0	0	0	0	0	0	0	0	0	0
29 Energy	\$ 693,391	0	0	0	0	0	0	0	0	0	0
30 Pods	\$ 44,794	17,917	25,084	35,118	26,398	0	0	0	0	0	0
31 Interest during construction	\$ 201,126	0	0	0	0	0	0	0	0	0	0
32 Cash Flow From/To Finance	\$ 4,890,368	(338,917)	(338,917)	(338,917)	(338,917)	(338,917)	(338,917)	(338,917)	(338,917)	(338,917)	(338,917)
33 Cash From/To Equity Investors	\$ 1,005,632	0	0	0	0	0	0	0	0	0	0
34 Cash From/To Debt (Principal)	\$ 4,223,653	0	0	0	0	0	0	0	0	0	0
35 Dividends	\$ 0	0	0	0	0	0	0	0	0	0	0
36 IRR to date	loss	(68%)	(15%)	17%	35%	46%	51%	51%	51%	51%	57%

Project Milestones and Spending Plan



Project Timeline

PRE-IMPLEMENTATION 3-9 months



IMPLEMENTATION / Development

First phase ready in 12 months. Fully operational in 18 months.

Phased rollout: Design → Install → Test

