



lyfpod[®]
WET AD



THE lyfpod[®] VISION

At Lyfpod, we are not just another waste management company.

Our combined mission integrates the community, industry, government and investors to provide the essentials of a progressive and sustainable way of life. In addition, Lyfpod aims to become a vanguard of local community empowerment. This "profit for purpose" approach has turned sustainability into our core business.

The steady growth of the middle income population, coupled with a rise in urbanization has led to increasing demands for energy along with an exponential rise in waste generation.

Lyfpod leverages on both these trends toward the development of a more sustainable economy by transforming waste into energy - turning this challenge into an opportunity.

Our competitive advantage arises from the modularisation, scalability, and tested reliability of the technology, with over 67 plants around the world.

Lyfpod seeks to emerge as a regional leader in Biomass waste to energy technology, developing sustainable, prosperous communities across the Asia Pacific.

THE WORLD NEEDS...

Clean and low carbon energy – renewable energy like solar, wind and bio-energy

A sustainable waste management solution that minimises the need for landfills

Fertile land – a growing and more affluent world population means exponential food production

Environmental

Closing the environmental cycle and producing renewable energy.

Economic

Sustained financial performance using proven and competitive technology.

Social

Contributing to livelihoods, communities and the upliftment of the disadvantaged.

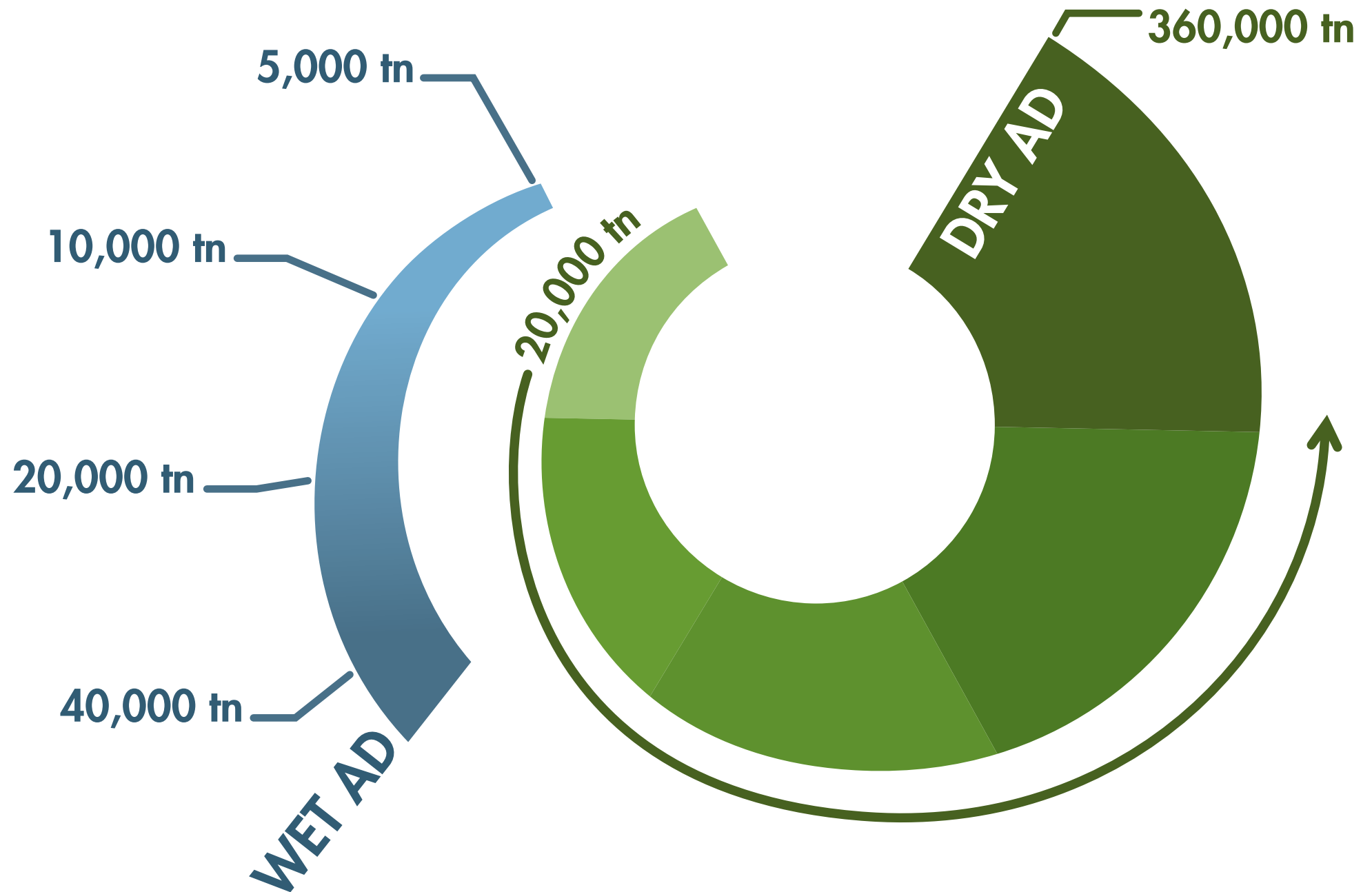
LYFPOD AIMS TO PROVIDE:

A holistic and sustainable waste management solution to our clients and their communities

A solution that creates an ecosystem in which the behaviour of organisations and communities can shift to create a better environment and more sustainable future

Job generation, R & D of sustainable and renewable technologies for developing countries and social empowerment programs for communities in need

ANAEROBIC DIGESTER PLANT CAPACITIES (per annum)





WET AD SYSTEM

Wet Anaerobic Digestion Turn-Key System

Lyfpod's WET Anaerobic Digester plants are based on mature technology that is environmentally and economically proven.

The modular construction model makes it possible for us to tailor each plant to the needs of the facility operator.

SWISS ENGINEERED BIOGAS PLANTS (5,000 tonnes / annum or greater)

USES AND BENEFITS OF LYFPOD WET AD SYSTEMS:

High-grade organic solid fertiliser

Cow manure is already widely spread on fields as a soil amendment. For many farmers anaerobic digestion increases the value of the bio-digested cow manure as a fertiliser. The anaerobic digestion process converts organic nitrogen into a mineralized form of ammonia or nitrate nitrogen.

High-grade organic liquid fertiliser

After solid separation, the liquid that is left can be spread on the fields retaining about 75% of the total nutrients of the original cow manure. Such liquid fertilisers can also be utilized in vertical farming and/or in hydroponic farms.

Odour and fly control

Lyfpod's anaerobic digesters consume odour-causing compounds as it moves through the digester, reducing odour issues. Anaerobic digestion reduces odour by 97% over fresh manure. Fly propagation is also limited in bio-digested manure as opposed to fresh manure.

Electricity, biogas and heat are generated

In addition to the option of generating power from the biogas that is produced Lyfpod also offers various systems to process this gas to the level of natural gas.

LYFPOD WET AD - COMPATIBLE ORGANIC WASTE:

Dairy Farm Waste:

- Cow Manure / Cattle Manure
- Agricultural waste

Sewage:

- Human excretory waste

Green Waste:

- Agricultural Waste
- Grass cuttings / tree clippings
- Mixed plant residues
- Mixed garden waste
- Cemetery waste
- Cuttings from embankment mowing and fallen leaves

Domestic Waste:

- Vegetable and fruit waste
- Food preparation waste
- Food waste

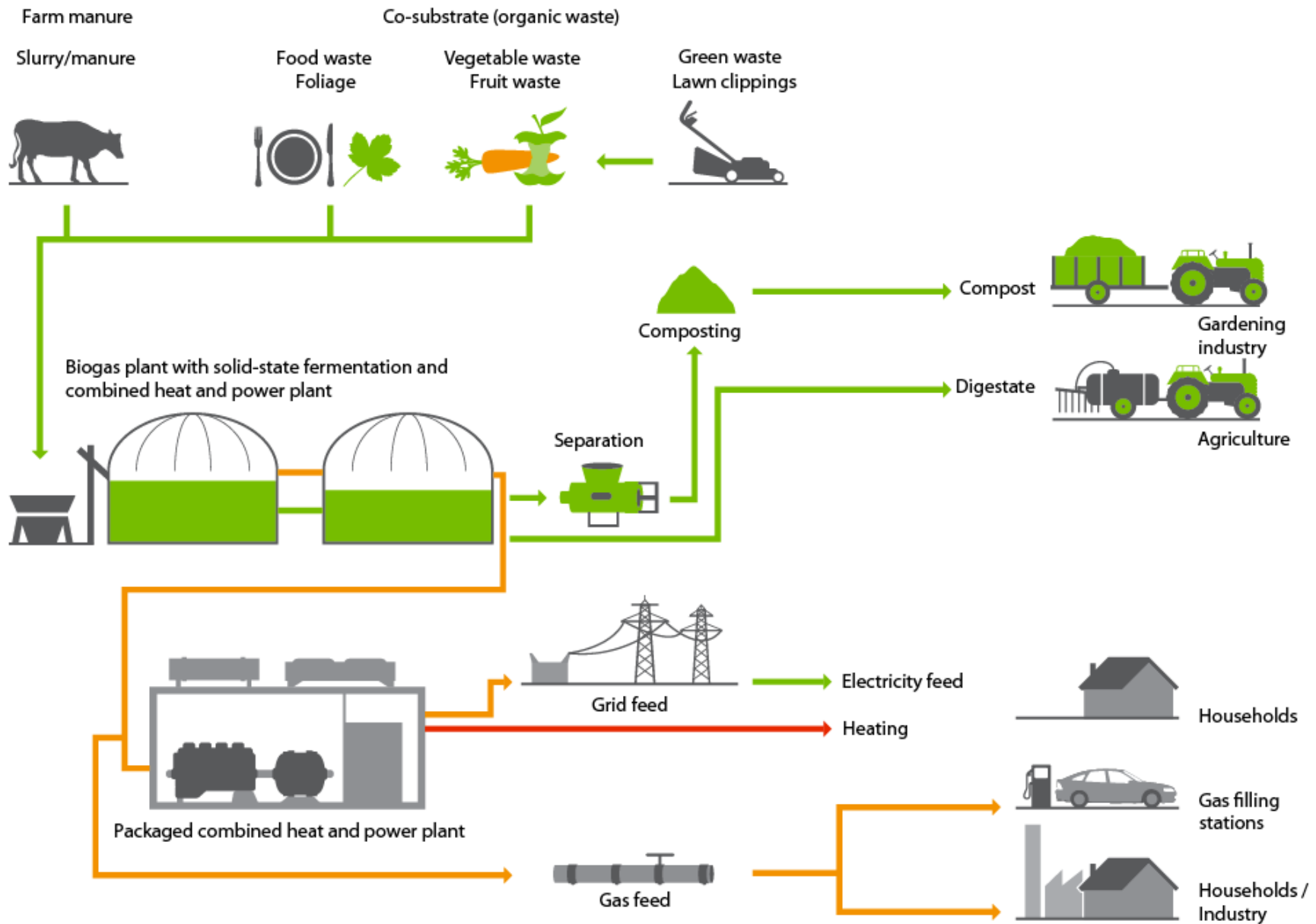
Commercial and Industrial Waste:

- Foodstuffs industry
- Waste from food preparation

Other Organic Waste:

- Algae, grease trap wastes

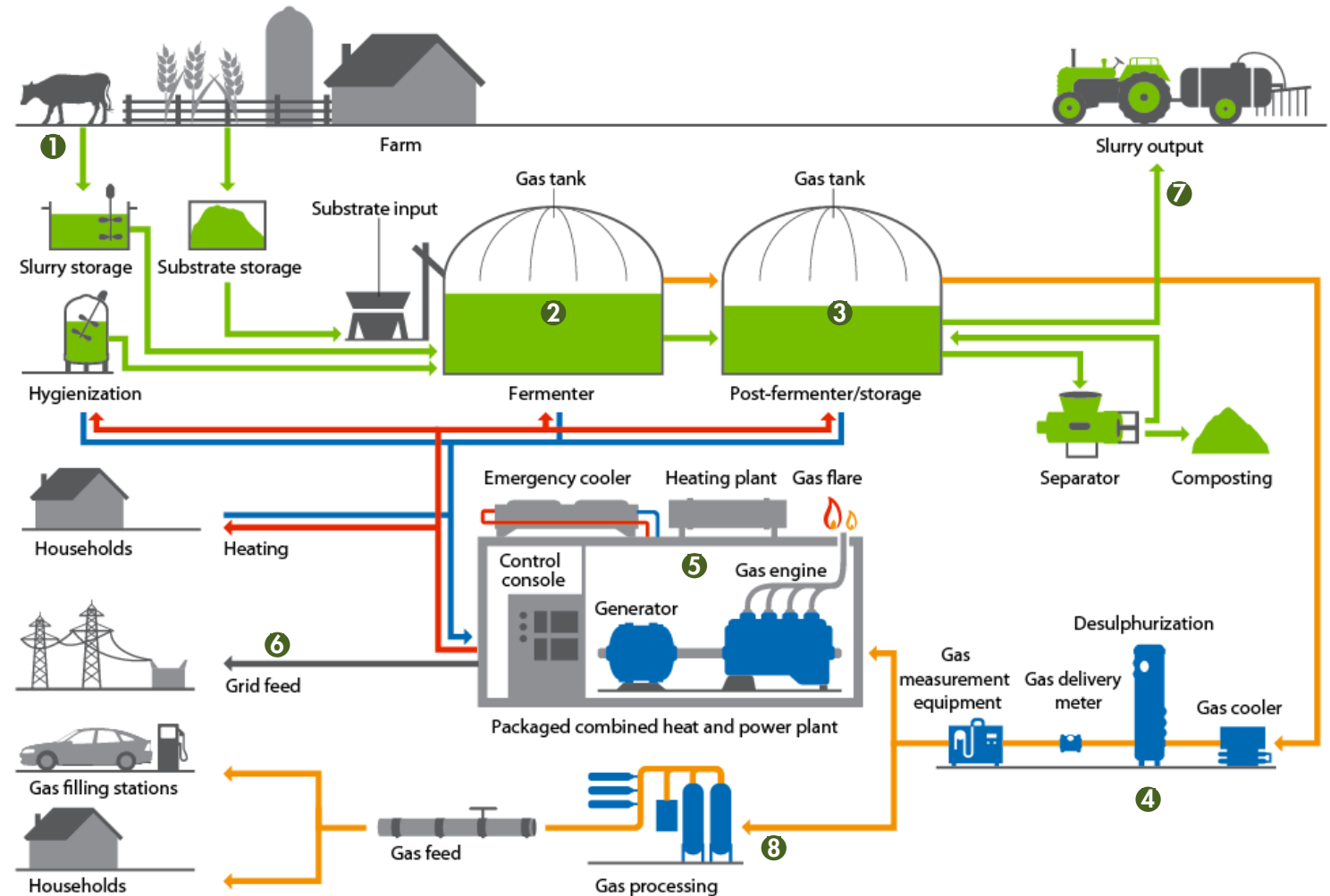
ENVIRONMENTAL CYCLE OF ORGANIC WASTE



HOW A BIOGAS PLANT WORKS

Biogas plants work on the flow principle.

1. Organic waste is mixed with manure and then fed into the biogas fermenter, which is the core of the plant.
2. In an environment free of light and oxygen, microorganisms, such as methane bacteria, ferment the biomass. This fermentation process produces a gas, which is primarily made up of valuable methane.
3. The gas is then captured in a tank. The higher the concentration of methane there is in the gas, the more energy-rich it is.
4. The gas is then desulphurized and dehumidified and then fed to the packaged heat and power plant via a gas supply line.
5. Here the gas is combusted to produce power and heat.
6. The power than is generated is fed into the local electricity grid.
7. The remaining residue from the fermentation process can be used a mineral-rich fertiliser for farming.
8. Optional Gas Processing Package to create fuel-grade Compressed Natural Gas (CNG) for vehicles and feed CNG gas into the gas grid network.



WET AD 40,000 tonne SYSTEM FACT SHEET(DAIRY FARM)

Table 1 & 2 are based on the following analytical data of cow manure, from Dairy Farm A:

Dry matter:	20.68%
Moisture:	79.32%
Crude Proteins:	14.52%
Organic matter:	84.75%
Crude Fibre:	32%
Purity:	95% *

*Assuming low soil contamination

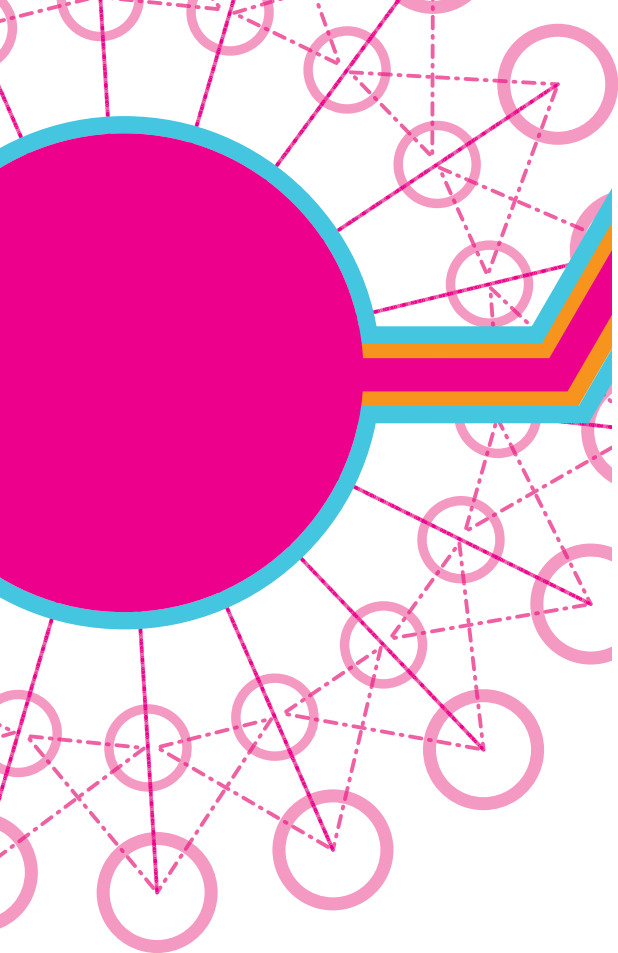
Table 1: Mass Balance

Fermenter Input:	40,000 tonnes / year
Fermenter Input / day:	111 tonnes / day
Solid Fertiliser:	21,375 tonnes / year
Liquid Fertiliser:	19,475 tonnes / year
Biogas produced:	3,040,000 Nm ³ / year

Table 2: Electricity generation, energy demand and net electricity export

Biogas production	3,040,000 Nm ³ /yr
Electricity generation	6,752,600 kWh/yr
Internal energy consumption	1,009,042 kWh/yr
Heat generation	6,726,950 kWh/yr
Capacity of gas engine	767 kWh

It is noted that these are estimates, which may change depending on the actual feedstock composition. Purity levels of the feedstock will alter the amount of biogas yields.



LYFPOD MANAGEMENT

DARSHAN SIVATHASAN (Managing Director)

Darshan Sivathasan brings his experience in leadership and management to his role as the Chairman / Managing Director of Lyfpod Holdings. After serving his national service with the Singapore Armed Forces, Darshan studied Biomedicine, before furthering his studies in Finance and Supply Chain Management. During this time he was a prominent leader, being a HR Director at AIESEC, a mentor for young entrepreneurs and helped found two other companies in Melbourne. Darshan intends to establish a sustainable waste management solution that creates an ecosystem in which the behaviour of organisations and communities can shift towards creating a better environment and a more sustainable future.

AKAASH SACHDEVA (Asst. Managing Director)

Akaash brings great insight on both accounting and corporate sustainability to his role as Assistant Managing Director at Lyfpod. In addition to working as an Accountant for a number of years, Akaash holds a Masters Degree in Corporate Environmental and Sustainability Management. He has ample experience in helping communities grow across the Asia Pacific region. At the intersection of business and the environment, Akaash is passionate to help communities develop through Lyfpod.

CHIRAG HATHIRAMANI (Finance and Investment Director)

Chirag Hathiramani, the Director for Finance and Investment, develops the financial and analytical processes of Lyfpod. Chirag has six years of experience on the public equity side of the U.S. commercial real estate industry and is currently a Financial Analyst at Vornado/Charles E. Smith (a division of Vornado Realty Trust) in Washington D.C. Chirag is responsible for various aspects of commercial real estate acquisitions/dispositions, financial underwriting, investment analysis, risk assessment and due diligence on institutional grade office, residential and mixed-use properties. Prior to his acquisitions career, Chirag assisted the operations and property management of a 750,000 square foot office/retail complex in Arlington, VA. He holds a B.S. from Virginia Tech and an M.S. in Real Estate from Johns Hopkins University. Chirag engages his passion for developing sustainable and thriving communities through Lyfpod.

SHARATH PADAKI (Engineering Director)

Sharath Padaki brings a unique and creative perspective with a wealth of knowledge in Electrical Engineering, Business Management and Graphic Design to his role as the Engineering Director for Lyfpod. During his University days, Sharath was elected as a student representative for the

RMIT School of Business as well as served as a mentor for third year engineering design students. After graduating with a double degree in Electrical Engineering and Business Management, Sharath is currently working as an Electrical Engineer at ABB Australia. In addition to this he has over four years of experience in graphic design and photography, serving various commercial and private clients. In doing this he has founded a privately owned photography and design business in Melbourne. He is driven to collaborate with communities to realise their potential, through Lyfpod.

NEIL FERNANDES (Engineering Director)

Utilising his knowledge and skills in the area of chemical engineering and biotechnology, Neil works alongside the founders of Lyfpod, as an Engineering Director. He worked with Brian & Rose Holding Pty Ltd as a Business Development Manager for four years in the fields of Engineering and Law. His accomplishments include expanding and integrating civil and environmental engineering services. While completing Chemical Engineering at RMIT University, he served as an academic representative for RMIT University's AIESEC group under the School of Chemical Engineering. Through Lyfpod, Neil aims to educate and empower people to strive towards a sustainable future through smarter and more sustainable lifestyles.



LYFPOD ADVISORY BOARD

FRANK GANENDRAN (Engineering Advisor)

Managing Director, E3
Consult Australia & Senior
Management in CDM

Frank Ganendran brings his experience leading operations for large engineering consultants in Austral-Asia to his role as Engineering Advisor at Lyfpod. These encompass multi-billion dollar environmental engineering projects including the Traveston Crossing and Wyaralong Dams in Queensland, and development of water infrastructure for West Java, Indonesia as well as consulting for the US Trade Development Agency, AUSAID, World Bank, Asian Development Bank, and Japan Bank for International Cooperation. Frank's experience leading these complex and large-scale projects provides Lyfpod with the depth of experience we need to successfully develop socially beneficial, environmentally friendly infrastructure.

KEN BALENDRA (Management Advisor)

Former Chairman, John Keels
Holdings Limited

Ken Balendra brings a career at the highest levels of business leadership leading to him being awarded the honour of Deshamanya (Pride of the Nation) by the Sri Lankan President. Ken was also the first Sri Lankan Chairman of John Keels Holdings Ltd., a highly diversified blue chip listed amongst the world's best 200 small companies by Forbes Global Magazine. Ken has

also had significant experience in developing public infrastructure, being appointed by the Sri Lankan President to the taskforce on rebuilding the nation following the tsunami disaster. His significant experience in the public and private sectors makes Ken an ideal advisor on management for Lyfpod.

PRAVIN AATHREYA (Legal & Regulatory Advisor)

Senior Associate, Johnson,
Winter & Slattery

Pravin Aathreya brings his legal experience in commercial dispute resolution and advisory to his role as Legal Advisor at Lyfpod. He has worked with major clients including Rio Tinto Australia, the Nine Network, and Queensland Health, providing him with significant experience in taking a pragmatic approach to legal and regulatory challenges. Pravin's legal insight strengthens Lyfpod's ability to proactively address any legal and regulatory issues we face.

VEERA SEKARAN (Green Industry Advisor)

Managing Director,
Greenology Private Ltd

Veera Sekaran brings his global experience on horticulture and the environment to his role as Green Industry advisor for Lyfpod. His experience spans consulting in Africa, Vietnam, India, and Malaysia, to being Head of Horticulture at Singapore's Changi Airport, and pioneering the successful Greenology Vertical Greenery and

Roof Garden systems, two innovative solutions to significant environmental challenges. Veera's current position and diverse exposure within the green industry keeps Lyfpod up to date with the latest developments and best practices in the industry.

ALLEN J. PATHMARAJAH (Finance & Strategy Advisor)

Chairman,
LR Global Lanka Asset
Management Company

Mr. Pathmarajah joined LR Global (investment vehicle of the Rockefeller Group) in 2010 as the Chairman of LR Global Lanka Asset Management Company. Previously, he was Executive Chairman of the AJP Advisers Group. He has extensive experience in Financial Services, Business and Management Consultancy in England, Sri Lanka, Singapore and Malaysia. Mr. Pathmarajah held senior management roles within the Oversea – Chinese Banking Corporation Group (OCBC) for 23 years – including Executive Director of the Management Consultancy Company, Special Assistant to the Group Chairman, and CEO of Great Eastern Life Insurance. Allen brings to Lyfpod his extensive experience in management and the financial services sector throughout South East Asia and the sub-continent.

We leverage our dynamism and innovation with the knowledge and experience of our group of advisers. With their experience, knowledge, and insight, our group of advisors present us with a deep pool of expertise from which to draw on in planning, managing, and growing Lyfpod.

MICHAEL LIM (Strategy Advisor)

Former Vice President,
DHL Asia Pac.

Michael Lim brings his experience in pioneering complex, large innovations to his role as Strategic Advisor for Lyfpod. Spearheading logistics projects and developing networks of facilities across the Asia Pacific and UK, as well as with 13 years in command as a Naval Officer, Michael is well placed to advise Lyfpod on our strategic development.





DESIGN

Global climate change presents both challenges and opportunities. We tackle it head on by transforming waste into resources. Call it integration at the highest level. Our eco-designs integrate the use of recycled construction materials, greening technologies, efficient water recycling systems, solar power, electric and biogas powered transport and creation of landscapes that attract biodiversity.

ENGINEERING & CONSULTING

Lyfpod has considerable expertise in putting together waste management solutions tailored to our customer's needs. We understand that every community and project is different. Be it analyzing your local waste market, customizing a Waste Treatment Plant (WTP) or putting together a dry or wet Anaerobic Digester (AD) system, we can provide turnkey solutions.

Through our partners, we also offer high performance greening solutions like vertical green walls and rooftop gardens, solar parks, etc. There's so much to engineering when it goes hand in hand with design!

Lyfpod offers the following Engineering and Consultancy services:

- Feasibility Studies
- Construction of dry / wet Anaerobic Digester (AD) systems
- Construction of Waste Treatment Plants
- Implementation of Solar Parks, Bio Fuel Plants / CNG systems
- Implementation of Vertical Green Farms
- Design and Development of Turn-key Eco-City Projects (Amoeba Project)
- Operations and Maintenance
- Engineering Designs
- Inspection and Reporting
- Project Management
- Maintenance Audits
- On-Site Inspections





Copyright © 2010 - 2012 Lyfpod Holdings.
Property of Lyfpod Holdings. All Rights Reserved.

www.lyfpod.com

LYFPOD HOLDINGS LLP (SINGAPORE)

85 NAMLY AVENUE, SINGAPORE 267654
T: +65 9735 5180

E: info@lyfpod.com || W: www.lyfpod.com

LYFPOD AUSTRALIA PTY LTD (MELBOURNE, AUSTRALIA)

116 / 61 MACKENZIE STREET, MELBOURNE 3000
T: +61 434 433 647 or +61 414 826 592

E: info@lyfpod.com || W: www.lyfpod.com

LYFPOD GREEN ENERGY PVT LTD (NEW DELHI, INDIA)

16 PASCHIMI MARG, VASANT VIHAR, NEW DELHI 110057
T: +91 11 2615 3300

E: info@lyfpod.com || W: www.lyfpod.com

ADVAITAA GREEN ENERGY PVT LTD (GOA, INDIA)

103-105 HEMMADY REGENCY, MALBHAT, MARGAO, GOA 403601
T: +91 83 2273 4250

E: info@advaitaa.in || W: www.lyfpod.com

Copyright Notice

No part of this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, without written permission from Lyfpod Holdings and is protected by the Republic of Singapore and international copyright laws.

Booklet designed by Sharath Padaki

Trademark Notice

Lyfpod Holdings' trademarks may not be used in connection with any product or service that is not that of Lyfpod Holdings in any manner that is likely to cause confusion, or in any manner that disparages or discredits Lyfpod Holdings.

Any concerns regarding the copyright notice or the use of Lyfpod Holdings' trademarks should be referred to Lyfpod Holdings at the following email address: info@lyfpod.com