



Before You Begin

Guide to Developing a Business Case



If approval from the hospital executive leadership team is required to implement a plastics recycling program, presenting a business case may be the best approach to request approval. This guide will help you prepare the business case.

The purpose of a business case is to present a concise summary of an opportunity and a proposed plan. It typically has four parts: (1) an overview of the opportunity, (2) a description of the proposal, (3) the anticipated and/or desired outcomes, and (4) the request for approval and support.

This guide is divided into three parts:

1. Tips for Preparing the Business Case
2. A Business Case Outline
3. Useful Background Information

Tips for Preparing the Business Case

- Keep it short – Assume that you will have 15 minutes of attention from the executive leadership team. Aim for 1-2 pages or 3-4 slides.
- If the business case is more than one page long, provide a one-paragraph Executive Summary at the beginning.
- Keep it clear and concise. Avoid jargon and use language that the executive leadership team will understand.
- Use the Economic Pro Forma tool to help estimate costs associated with implementing a plastics recycling program at your hospital. Use your hospital's standard financial metrics when presenting the cost analysis.

Business Case Outline

Executive Summary if needed. Keep to one paragraph.

- What is the opportunity? Describe hospital's waste stream and opportunities for recycling plastic.
- What is the proposal? Describe key aspects of the proposed hospital plastics recycling program. Describe alignment with hospital sustainability strategy.
- What are the anticipated / desired outcomes? Describe potential amount of diverted plastic waste materials, cost savings, environmental benefits, and community benefits.
- Request approval and support to implement program.

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The Overview of the Opportunity

- Healthcare Waste Management Costs and Environmental Footprint
 - Consider presenting general information about healthcare waste generation and healthcare plastics (see Background Information at end of this guide for more information).
 - Discuss the environmental opportunities from recycling plastics (see Background Information at end of this guide for more information).
 - Present an overview of your hospital operating costs and breakout of waste management costs.
 - Present your hospital waste profile, including amount of waste generated per day or per year and amount of healthcare plastics within your hospital waste stream. If the amount of healthcare plastics within your hospital waste stream is unknown, you can use information from literature to develop an estimate (see Background Information at end of this guide).

- Your Hospital Sustainability Program
 - Describe your hospital's sustainability policy, strategy, aspirations, etc.
 - Describe your hospital's existing waste diversion/recycling programs.
 - Discuss how adding plastics to the waste recycling program aligns with your hospital's sustainability aspirations.

The Description of the Proposal

- Proposed Plastics Recycling Program
 - Present an estimate of the quantities of plastics available for recycling within your hospital.
 - Emphasize that the program will focus on clean, non-infectious plastics materials.
 - Present a summary of estimated costs or savings from implementing the plastics recycling program. Present costs/savings in financial metrics that are used at your hospital such as \$/staffed bed, \$/patient day, return on investment, etc.
 - Remember to present only the incremental costs associated with adding plastics to existing waste recycling programs (See Economic Pro Forma tool).
 - Discuss Key Performance Indicators (KPIs) that will be used to monitor progress and success.

- Key Changes Required
 - Identify significant changes that will be required to implement the recycling program, such as:
 - Capital improvements and/or equipment purchases
 - Staff concerns or union contract negotiations
 - New vendor contracts

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Description of the Proposal (continued)

- Key Factors for Success
 - Identify key stakeholders needed for a successful program, such as EVS staff, Green Team Champions, Functional Area Directors/Leaders, nursing staff, etc.
 - Identify key measures that will be implemented to prevent contamination of the recyclables stream.
 - Identify any other key factors for success and any assistance needed to assure success.
- High level schedule for program implementation with key milestones.

The Anticipated and/or Desired Outcomes

- Cost Savings
 - Summarize the estimated costs or savings from implementing the plastics recycling program. Present information in the financial metrics that are used at your hospital
- Environmental Benefits
 - Present the environmental benefits based on estimated amounts of plastics to be recycled (see Background Information at end of this guide for more information).
- Community Benefits
 - Describe the benefits to the local community by implementing a plastics recycling program at the hospital. For example, recycling plastics will decrease landfill use, align with the local community's sustainability programs, increase business with local recyclers, etc.

The Request for Approval and Support

- Request approval and support from executive leadership team to implement the plastics recycling program.

Although these details do not need to be included in the business case, be prepared to discuss the following:

- *Functional areas that will be included in the plastics recycling program and the reasons for selecting these areas (large quantities of clean, non-infectious plastic waste materials are generated, waste recycling programs are already in place, local recycling champions are enthusiastic, etc.).*
- *Types of plastic waste materials that will be collected from these functional areas and the estimated plastics diversion amounts and rates.*
- *The process by which plastic materials will be collected, prepared, managed, and transferred to the recycler. Describe measures that will be implemented to prevent contamination by regulated materials.*
- *How plastics recycling will be integrated into other existing recycling programs. Identify key staff that will be involved in the program and any space and/or equipment needs.*
- *The company that will be collecting and recycling the plastics. Identify if modification of an existing contract or if a new contract will be required.*
- *The schedule for program implementation, milestones, and KPI goals.*

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Useful Background Information

As health care costs continue to escalate, one area to look for improvements and savings is the hospital's large and costly environmental footprint. Waste management is a significant part of a hospital's operating costs and environmental footprint. Recycling waste plastics is one waste reduction initiative that can reduce a hospital's operating costs and reduce a hospital's environmental footprint, often with minimal effort and cost.

Healthcare Waste Generation. *Did you know?*

- Hospitals generate an estimated 6,600 tons of waste per day¹.
- It is estimated that 20-25% of a hospital's waste stream is plastic materials².
- Up to 85% of a hospital's waste is non-hazardous material³.

Based on this general information, an initial estimate of the amount of the plastics available for recycling at your hospital might be calculated as follows:

$$\begin{array}{c} \text{Total Estimated Amount} \\ \text{of Plastics Available for} \\ \text{Recycling (tons/year)} \end{array} = \begin{array}{c} \text{Total Amount of Hospital Waste} \\ \text{(solid, hazardous,} \\ \text{regulated medical, recycled)} \\ \text{(tons/years)} \end{array} \times 25\% \times 85\%$$

See the Economic Pro Forma Tool for assistance in calculating quantities and costs of plastics recycling.

Environmental Opportunities. *Did you know?*

- In 2010, 31 million tons of plastic waste was generated in the US; only 8 percent was recovered for recycling⁴.
- Recycling one ton of plastic saves...
 - 16.3 barrels of oil⁵
 - 30 cubic yards of landfill space⁵
 - 5,774 Kwh of energy⁴, enough to power an average house for 6 months⁶

REFERENCES

- 1 Kaplan, Susan, Blair Sadler, Kevin Little, Calvin Franz, and Peter Orris. "Can Sustainable Hospitals Help Bend the Health Care Cost Curve?", The Commonwealth Fund, Issue Brief, November 2012.
- 2 Lee, B., M. Ellenbecker, and R. Moure-Eraso. "Analyses of the Recycling Potential of Medical Plastic Wastes." Waste Management (2002): 461-470
- 3 Grogan, Terry. "Solid Waste Reduction in US Hospitals." Hospital Engineering & Facilities Management (2003): 88-91.
- 4 <http://www.epa.gov/osw/conserve/materials/plastics.htm>
- 5 <http://greenliving.nationalgeographic.com/benefits-savings-recycling-plastic-3219.html>
- 6 <http://205.254.135.7/tools/faqs/faq.cfm?id=97&t=3>