

Living Laudato Si' Sustainability Pilot 2019

Program Report prepared by the Creation Care Commission





Living Laudato Si' Pilot Sustainability Program

November 25, 2019

Archbishop Charles C. Thompson Roman Catholic Archdiocese of Indianapolis Catholic Center 1400 North Meridian Street Indianapolis, Indiana 46202

Re: 2019 Living Laudato Si' Pilot Sustainability Program Report

Dear Archbishop Thompson:

Enclosed is one copy of our 2019 Living Laudato Si' Pilot Sustainability Program Report for your consideration. Based on the results of our efforts during the Summer of 2019, we believe the pilot program was a real success, and we hope to continue with your support to expand our efforts throughout the Archdiocese in the coming year.

If you have any questions or comments regarding the report and its recommendations, we would be interested in meeting with you whenever it is convenient to discuss next steps.

Sincerely in Christ,
Archdiocese of Indianapolis
Creation Care Commission

John Mundell and Rosemary Spalding, Our Lady of Lourdes Sharon Horvath and Andy Pike, St. Thomas Aquinas Sister Sheila Fitzpatrick, Sisters of St. Benedict, Beech Grove Joe Shierling, Saints Peter and Paul Cathedral Alicia Nygra, St. Malachy

/jam

cc: Deacon Mike Braun, Director of Pastoral Ministries

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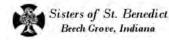
Thanks to the Supporters of the 2019 Pilot Program













ARCHDIOCESE OF INDIANAPOLIS CREATION CARE COMMISSION LIVING LAUDATO SI'S SUSTAINABILITY PILOT PROGRAM 2019

FINAL REPORT

EXECUTIVE SUMMARY

The objective of the Living Laudato Si' Sustainability Pilot Program was to respond to the call to action presented in Pope Francis' encyclical Laudato Si' and begin to lower the carbon footprint of the Archdiocese of Indianapolis. Four parishes and one high school in the archdiocese comprised the initial cohort. These included: Holy Spirit Catholic Church, Our Lady of Lourdes Catholic Church, St. Mary Catholic Church (Indianapolis), St. Matthew Catholic Church, and Scecina Memorial High School. The 10-week program took place between May and August 2019. During that time, the Archdiocese Creation Care Commission (CCC), through its program summer interns, conducted comprehensive assessments with each participant in all areas of operations, including: energy use, water use, building maintenance, food service, waste management, transportation, outdoor space, and purchasing. These assessments were completed primarily through interviews and self-evaluations developed by the CCC and distributed to participant stakeholders.

To establish good communication and buy-in from the stakeholders, the CCC hosted a kick-off event, two educational workshops and a concluding celebration. The programs covered participant expectations and commitments, energy efficiency in sacred spaces, the basics of climate change, Catholic social teaching on climate change, and best operational practices for parish facilities and schools. The workshops gave attendees practical information on implementing sustainable practices within their parish and/or school. Weekly direct email and telephone communications provided participants with program activity updates and bulletin inserts to describe the program.

The CCC worked with Indianapolis Power and Light (IPL) to coordinate energy assessments that included a site visit by IPL installers to review the facilities and install replacement LED lights where appropriate. After the assessment, each parish/school was provided with a brief report that included recommendations for future modifications. After completion of the comprehensive assessment, meetings were held with key stakeholders in each parish/school to discuss the on-site results and develop goals in each area of the assessment. These goals were then turned into a draft 12-month sustainability program for implementation, with ongoing progress monitoring by the CCC throughout the coming year.

By the end of the 10-week program, the CCC developed an online resource for parishes, schools and parishioners, and launched the new website www.OurCommonHome.org on September 1, 2019, to mark the beginning of the Season of Creation. The website is updated regularly.

Key to expanding the pilot program throughout the archdiocese is developing protocols that can be used by other parishes/schools either independently or with assistance. The CCC currently is developing a workbook for this purpose. Both the workbook and the website will be continuing 'works in progress' that will be improved and updated as appropriate and possible with available resources.

BACKGROUND

In his 2015 encyclical *Laudato Si'*, Pope Francis conveyed to the world an urgent call to action to address the causes of global warming and prepare for the inevitable impacts of climate change, especially those impacts to the poor and most vulnerable. Pope Francis made clear that caring for creation is a moral imperative as it relates to respecting the inherent dignity of all life. With the blessing of then-Archbishop Joseph Tobin, the Archdiocese of Indianapolis Creation Care Commission came together to respond to Pope Francis' call to action.

Since then, the Commission has made some progress with the help and leadership of Deacon Mike Braun, although the lack of staff and resources has limited meaningful progress. The Commission was able to take a significant step forward in the summer of 2019, however, thanks to a grant for a full-time intern from the Indiana University Indiana Sustainability Development Program (ISDP), as well as three part-time interns from Mundell & Associates, the availability of energy assessments by Indianapolis Power and Light (IPL), the generosity of several financial sponsors, and, of course, approval by Archbishop Thompson.

During June, July and early August 2019, the Creation Care Commission conducted a 10-week sustainability pilot program in four parishes and one school -- Holy Spirit, Our Lady of Lourdes, St. Mary, St. Matthew and Scecina Memorial High School. During the program, each location conducted comprehensive assessments of their buildings and operations and used those assessments to work with the CCC to develop a 12-month Sustainability Action Plan tailored to the unique needs and situations of the parish or school. This sustainability pilot program serves as an important first step towards integrating sustainable practices into all operations of the Archdiocese of Indianapolis.

2019 PILOT PROGRAM COMPONENTS

The structure for the 2019 pilot program was developed over a period of several months prior to its start. This included developing program administrative support documents, beginning communications with Archdiocese Thompson and gaining approval through Deacon Mike Braun, and recruiting/selecting participants based on interest, location and diversity with respect to level of knowledge, experience and actions already taken, and willingness to make specific commitments through the Covenant of Commitments with the CCC. Each participant identified key staff and other stakeholders who needed to be involved in the assessments and development of the 12-month action plan.

Once the 10-week program started, the ISDP intern sought input from the participants regarding preferences for methods and frequency of communications and educational opportunities. The CCC's goal was to provide useful information and education without imposing unnecessary or excessive expectations on participants.

The 2019 sustainability pilot program included the following key components:

Participant Commitment/Communications

In late 2018, prior to enlisting the parishes/school into the pilot program, the CCC developed Mission/Vision/Values statements for the Creation Care program that were approved by the Archbishop, along with a summary of 2019 goals. A 10-week schedule was set for the Pilot Sustainability Program and a Living Laudato Si Sustainability Pilot Program Covenant of

Commitment was developed and agreed upon by each participant. These program supporting documents are provided in **Attachment No. 1**.

Contact information for each parish/school pilot program team were collected and used to provide direct communication via email and FlockNotes. Weekly broadcasts of program updates and bulletin inserts were provided to the participants to keep them abreast of the activities and

planned events. *Laudato Si'* prayer cards were distributed and used during Mass at some of the participating parishes.

To garner further commitment and encourage community and communication among the participants, the CCC hosted a kick-off event and a concluding celebration. These events, along with the workshops, gave participants a chance to share success and challenges with each other.



Facility Self-Assessment

The Archdiocese CCC, through its program summer interns, conducted comprehensive assessments with each participant in all areas of operation, including energy use, water use, building operations and maintenance, food service, waste management, transportation, outdoor space, and purchasing. These assessments were completed primarily through interviews and self-evaluations developed by the Creation Care Commission and distributed to participant stakeholders, Program template forms are provided in **Attachment No. 1**.

Facility Energy Audit

The Creation Care Commission worked with Indianapolis Power and Light (IPL) to coordinate energy assessments through the Small Business Direct Install Program. With this program, IPL installers made a site visit and conducted a free assessment to check the status of lighting in



the buildings and check for ballast compatibility. During the assessment, they installed free LED products to ensure that savings in the facility started immediately. After the assessment, the participating location was given a rebate card so that future purchases would come with a discount. The

parish/school was also given a report that included a savings report from the initial assessment, as well as

recommendations for the future. In addition to this initial visit, the Small Business Direct Install Program also offers installation of occupancy sensors through Godby Heating Plumbing Electrical. These appointments were made around a month following the energy assessment, and installation of those sensors was at no cost to the participants.



Educational Workshops

The Creation Care Commission hosted two workshops during the 10week period. The first of the two workshops, "Saving Energy in Sacred Spaces," was conducted by Hoosier Interfaith Power and Light. The second workshop, conducted by the program interns and a scientist from the Purdue Climate Change Research Center (PCCRC), covered the basics of climate change, Catholic social teaching on climate change, and best operational practices for parish facilities and schools. Both workshops gave attendees practical information on implementing sustainable practices within their parish and/or school.

12-Month Sustainability Action Plan

After completion of the comprehensive assessments, the ISDP intern met with key stakeholders for each participant to discuss the results from of the assessments and to develop goals in each area assessed. The Commission intern used the assessments and goals to prepare a report for each participant, which included a draft 12-Month Sustainability Action Plan. The full report for each participant is included in **Attachment No. 2**. Each draft Sustainability Action Plan is tailored to the unique situation of the individual participant. Each participant will refine its Sustainability Action Plan and identify the timeline and leaders for the projects they choose to implement in the next 12 months.

Program Resource Development

The Mundell interns researched and developed best management practices as guidelines for the Sustainability Pilot Program participants and as a resource for other parishes, schools,



ministries and other offices in the future. The Creation Care Commission developed an online resource for parishes, schools and parishioners and launched this new website on September 1, 2019, to mark the beginning of the Season of Creation. The website is at www.ourcommonhome.org. It is updated and added to regularly.

Program Evaluation/Feedback

Because this was a pilot program, the Creation Care Commission was particularly interested in obtaining

evaluations, feedback and suggestions throughout the process. The Commission intern provided evaluation forms several times during the program and solicited oral feedback during meetings and workshops. Several evaluation responses are included in **Attachment No. 3**.

DRAFT ACTION PLAN COMPILATION

A summary of each of the participant draft Action Plans tailored to the unique situations of the individual parish and/or school is provided in the following paragraphs and in **Table 1.** It will be the responsibility of the parish/school to identify a timeline and leaders for the projects they choose to pursue. Members of the CCC will monitor progress toward goals and offer assistance over the next year.

Action Plan Summaries

St. Matthew - Key elements of the action plan for St. Matthew Catholic Church are increased energy efficiency and increased recycling efforts. Their priorities are to replace old roof lighting and gym lighting with LED bulbs, which will greatly decrease their energy use. They also want to start recycling plastic, which will decrease their carbon footprint by decreasing the amount of waste headed to a landfill or incinerator. Educating staff at the beginning of the school year will be crucial to increasing buy-in from the school. Educating parishioners and actively partaking in the Season of Creation activities will help engage the parish at large.

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St. Mary - Key elements in the action plan for St. Mary Catholic Church include waste management and education, particularly the elimination of the use of styrofoam and disposable products at their Sunday food sales. They plan on educating parishioners, especially the Hispanic community, on the importance of recycling and other sustainability efforts. Focusing on hosting educational opportunities after Mass on Sundays will be crucial for gaining parish involvement, since most parishioners are only able to travel to the church on Sunday.

Our Lady of Lourdes - Key elements of the action plan for Our Lady of Lourdes include LED updates, recycling at the school, and streamlining the recycling process for Bernadette Hall. The gym lights will be prioritized first, followed by the kitchen and cafeteria; remaining areas of the

school will follow. Educating students about recycling, along with creating standardized signage for recycling bins and starting recycling at all events, will greatly increase the recycling rates in both the school and the parish. Streamlining the process for Bernadette Hall will greatly reduce the amount of waste

generated by activities in the space. Educating staff at the beginning of the school year will be crucial to increasing buy-in from the school. Educating

parishioners and actively partaking in the Season of Creation activities will help engage the parish at large.

Holy Spirit - Key elements of Holy Spirit's action plan include working with vermiculture and native landscaping, and investigating the use of solar energy. The Creation Care team has taken an interest in looking at options for solar energy. Vermiculture is a good way to connect the

school kids with the process of composting and organic gardening, while also reducing the amount of organic waste that ends up in the landfill or incinerator. The property has a lot of green space, so there is plenty of room to plant a rain garden or pollinator garden with native landscaping. Educating staff at the beginning of the school year will be crucial to increasing buyin from the school. Educating parishioners and actively partaking in the Season of Creation activities will help engage the parish at large.

Scecina Memorial HS - Key elements in SMHS's action plan are community service/outreach and student engagement. Their "Red and



Gold Going Green" club has the potential to involve the entire community in both service and education through sustainability-related service projects and outreach to local schools. They have the capability to take charge of some of the projects

such as composting and planting a pollinator garden. Educating staff at the beginning of the school year and partaking in the Season of Creation activities will be helpful

in gaining buy-in for the program. Scecina Memorial High School is dedicated to a mission of excellence in every aspect of education and integrating sustainability into their operations is the next step of their mission.

Table 1. Living Laudato Si' Pilot Program Action Plan Compilations

Parish/School	St. Matthew	St. Mary	Our Lady of Lourdes	Holy Spirit	Scecina		
	ENERGY						
LED Lights	0 *		O**				
Install occupancy sensors	0		0	0	0		
Replace appliances with Energy Star	0		O***				
Inventory "energy users" in building					0		
Obtain and use a programmable thermostat at recommended settings	0				0		
Obtain and use smart power strips	0	0	0	0	0		
Investigate solar options				0	0		
Create good practices signage	0	0	0	0	0		
Invest in IPL Green Power Option	0	0	0	0	0		
Maintain Portfolio Manager account	0	0	0	0	0		
Investigate solutions for HVAC system					0		
*roof, gym, school, church **gym, cafeteria, kit							
WATER							
Save water in rain barrels	0		0	0	0		
Use "green" cleaning products	0	0	0	0	0		
Install low-flow faucet aerators/showerheads	0	0	0	0	0		
Install faucets with sensors	0	0	0	0	0		

WASTE					
Start composting in kitchen	0			0	0
Start vermiculture composting				0	
Eliminate use of Styrofoam products	0	0	0	0	0
Reduce use of disposable goods		0		೦್	
Invest in reusable dishes		O***	O ⁴	0′	
Begin or expand Recycling; Streamline process	O*		O ⁴		O ⁸
Place recycling bins	O**		O ⁵		O**
Create standardized recycling bin signage	0		0	0	ဝီ
Start or increase recycling at events		0	0		
Recycle batteries/e-waste/toner cartridges				0	0
Host a community technology waste drive	•			0	0
Conduct food waste audit	0			0	0

*Plastic **classrooms/offices ***events ⁴staff lounge/Bernadette Hall ⁵ cafeteria ⁶Utensils ⁷Kitchen ⁸bottlecaps ⁹cc logo

Table 1.
Living Laudato Si' Pilot Program
Action Plan Compilations (continued)

		_	1	•	, ,
Parish/School	St. Matthew	St. Mary	Our Lady of Lourdes	Holy Spirit	Scecina
	PURCHAS	SING			
Take inventory of all products purchased; consider source	0	0	0	0	0
Create/implement green purchasing policy	0	0	0	0	0
Buy local goods/services	0	0	0	0	0
Buy materials made from recycled content				0	
	OUTDOOR S	SPACE	Г		
Install compost bin	0				
Reuse flowers if possible (wedding, etc.)			0	_	_
Plant/maintain native landscaping	0		0	0	0
Plant a pollinator garden	0			0	0
Plant a vegetable garden					0
Install a rooftop garden					0
Investigate options for rain garden				0	
Buy rain barrel and harvest rainwater	0		0	0	
Investigate beehive purchase					0
Purchase organic fertilizer/pesticides					0
Plant more trees				0	O*
*Class tree		•			
	TRANSPOR'	TATION			
Start a "no idling" policy	0		0	0	Ιο
Encourage carpooling	O*		0	0	0**
Install more bike racks				0	0
Host bike safety workshops				0	
Bike riding activities for students				0	
Encourage group rides/walks			0		0
Educate about/encourage use of IndyGo			0		
*staff **students create incentives		J.			
Stair Students create incentives	Education	Tooks			
Heat Landata Cil anno estatione (dia essaina					1
Host Laudato Si' presentations/discussions	0	0	0	0	
Strengthen/expand Creation Care team			0		
Host recycling workshops		0	0	0	
Develop educational materials/sustainability curriculum	0	0			0
Teach students about the importance of not wasting	0				
Educate staff/students	0		0		0
Educate parishioners on repurposing items			0		
Host workshops on different topics					0
Start speaker series for students					0
Create options for sustainability related service projects					0
Expand "Going Green" club/outreach to					_
schools					0
Monarch butterflies in the classroom	0		0	0	
Calculate carbon footprint before and after program	0		0	0	0

PILOT PROGRAM OBSERVATIONS

The following summarizes some of the positive outcomes observed during the program, and also some of the challenges faced in its implementation.

Positive Outcomes

First, approval and support from Archbishop Thompson was key to the success of this program. Discussion with the Council of Priests reaffirmed this support and spread the word about the program.

Secondly, the overall structure of the program was successful. Each participating parish or school signed a covenant of commitment and held an initial meeting with key stakeholders in the parish which clarified these expectations. The assessment forms made by members of the

CCC and filled in by key stakeholders were successful in evaluating business operations.

Communication using Flocknotes and email during this program was very effective. Every Friday, a newsletter providing general updates, information regarding upcoming events, and other relevant information pertaining to



the program was sent. This allowed the Commission to communicate with both participants and other interested parties who were not in the original cohort. Positive feedback was received regarding the concise, informative, and engaging format.

Multiple events held throughout the pilot program effectively engaged participants. The opening event set the tone for the program and provided clarity as to expectations of participants. Each participating parish or school was represented, with pastors from three of the four parishes and the president of the participating high school in attendance. An educational game was used as an ice-breaker to encourage interaction between participants. To further advance the theme of



sustainability, this event was also vegan and zero-waste. A closing celebration was held during the last week of the program where each participating parish/school previewed their draft action plan and reported major aspects of their plan to other participants. A group discussion was held in

which participants voiced their overall impressions of the program and shared their aspirations for the coming year. Awards were presented to participants as members of the "inaugural sustainability pilot program," and a group photo was taken.

The two educational workshops, "Saving Energy in Sacred Spaces" and the multi-topic workshop covering the basics of climate change, Catholic social teaching on climate change, and best operational practices for parish facilities and schools, received positive feedback for

providing practical information. There were around 20 people in attendance at each workshop. Both events were also hosted in early afternoon during the work week, which allowed many of

the parish staff members to attend. The information presented at these workshops was relatively simple and captured a broad audience. The last two parts of the workshop were conducted by young adults; this received good feedback, as it offered a young perspective to the issues at hand. Both workshops were successful.



The Indianapolis Power and Light (IPL) energy audits were another successful

component of the program. Appointments were scheduled and communicated well in advance. Post-visit reports were sent within 24 hours after the site visit. Free energy-saving equipment was a bonus.

Challenges

Several challenges presented themselves during the pilot program. The IPL reports were generally sparse in their content. The reports provided general numbers of installed fixtures, but did not provide information about the location of those installations. Furthermore, it seemed that communication between IPL and Godby regarding installation of motion sensors was not clear.



Participating parishes and schools were under the impression that an appointment would be made with Godby to install motion sensors on their property. In reality, the company gave very little notice of their arrival, which presented challenges with scheduling.

Another challenge was scheduling events, such as educational sessions. With five participating

parishes and schools, it was difficult to find a time that worked well for everyone. In addition, working with staff and volunteers presented a scheduling challenge. Staff preferred meeting times during the workday, whereas volunteers usually were not available during that time.

Spreading the word about the pilot program among potential stakeholders of each participant was also difficult. Most of this communication spread through word-of-mouth. Understanding how to effectively utilize existing parish/school and archdiocesan communication networks and communicate the importance of the program to gain the future buy-in of parish leaders and priests remains an obstacle for program success.

Following up on progress of the action plans will be a challenge. Currently there is no structured plan for following up with the participating parishes and schools. Unless the CCC can actively and accurately track progress on the five Sustainability Action Plans, we will not be able to evaluate the ultimate success of the pilot program. Also, as the school year starts and other projects may take priority at the parish and/or school, implementation of the action plans may

lose momentum. Currently, the CCC only includes volunteers to monitor the program since the intern support received during 2019 ended in September.

The geographic reach of the Archdiocese will also be a challenge. It will be difficult to engage high schools and parishes outside the Indianapolis area because of the distance and the current level of support for Creation Care in the Archdiocese.

CONCLUSIONS

Based on feedback from stakeholders in participating parishes/schools, we can conclude the following:

- 1) The Sustainability Pilot Program was a success!
 - a. It raised awareness about the importance of concrete action.
 - b. It increased engagement in Creation Care at every location.
 - c. It established a baseline of existing conditions from which to measure improvement.
 - d. It set a tentative course for future actions.
- 2) Implementation of this program in the future requires additional archdiocesan funding and personnel resources. The interns and financial resources were donated and funded by external means (*i.e.*, non-budgetary funding). In order to be successful, it will be necessary to provide funding for the program in order to bring it forward, including funding for sustainable energy alternatives (such as solar).
- 3) Engagement of the priests/principals in Creation Care is needed in order to help it spread within the parishes/schools. Each participating parish/school had support at this level.
- 4) Based on these initial assessment efforts, the Archdiocese of Indianapolis is at the 'beginning stages' of implementing the vision of Laudato Si. If the archdiocese is going to be successful in meeting any climate action goals, additional efforts and increased financial support will be needed to advance this program.



RECOMMENDATIONS

Based on feedback from stakeholders in participating parishes/schools in the pilot program and observations from personal experiences, the Creation Care Commission has several recommendations.

- 1) Provide ongoing support for pilot program participants
 - Follow up communications from the commission
 - Evaluate progress on action plans
 - 6-month meeting to determine progress and needs
 - Encourage the pilot program cohort to continue meeting to discuss best practices
 - Schedule additional educational events (e.g., recycling in Indiana)

2) Continue the program with a second cohort (target 10 parishes) in summer of 2020

- Secure interns for the summer of 2020
- Use lessons learned to expand the program
- Consider holding ArchIndy Creation Care webinars
- Issue a 2020 Archdiocese of Indianapolis Sustainability Report

3) Expand the scope and secure the future of the Sustainability Program

- Develop a 2020 archdiocesan budget for sustainability
- Consider a part-time/full-time paid sustainability coordinator reporting to the CCC
- Set target Sustainability Goals as an archdiocese
- Develop and form support groups with deanery cohorts of parishes
- Consider other ways to reduce utility costs in parishes (in addition to energy use reductions)
- Investigate funding/grants for energy improvements
- Investigate whether the archdiocese can make large purchases of energy efficient equipment to get volume discounts (e.g., solar panels, lighting, lighting controls)
- Develop a *Green Parish Certification Program* (similar to H-IPL Cool Congregations)
- Use regular meetings of the Archdiocesan facilities managers to share information

5) Track resource use throughout the archdiocese using the Portfolio Manager or Energy Stewards programs

6) Promote the archdiocesan sustainability program

- Expand and organize resources on the website www.OurCommonHome.org to aid parishes with self-audits, projects, and beginning parish Creation Care Ministries
- Develop communications platforms to allow sharing of case histories and success stories

ACKNOWLEDGEMENTS

The 2019 Sustainability Pilot Program would not have been possible without the help and support of several organizations, businesses and numerous individuals. First, the Creation Care Commission is grateful to Archbishop Thompson for his approval of the pilot program and to

Deacon Mike Braun for his encouragement and suggestions throughout the process. The Commission also acknowledges and thanks Monsignor Paul Koetter, Father Carlton Beever, Father Nick Dant, Father Rick Ginther, Mr. Joe Therber and their staffs. Their leadership, enthusiasm and commitment were necessary to the success of this effort, and Commission looks forward to their continued involvement.



Also essential to the success of the Sustainability Pilot Program were the summer interns provided by the Indiana University Indiana Sustainability Development Program (ISDP) and Mundell & Associates. ISDP intern Alicia Nygra, a sophomore at IUPUI and member of St. Malachy Catholic Church in Indianapolis, is now a member of the Creation Care Commission. Mundell Interns from their Economy of Communion program included Giordana Pereira Scherer from Sapucaia do Sul, Brazil, João Paulo Manarelli Gaspar from Vargem Grande Paulista,

Brazil and Isabel Villarraso Lopez from Granada, Spain. In addition, the CCC thanks Julie Reyes, another Mundell & Associates staff person and member of St. Mary Catholic Church, whose technical expertise with web development, social media and communications were invaluable to the success of our program.

A cornerstone of the Sustainability Pilot Program was the energy assessment provided to each participant by Indianapolis Power & Light (IPL). In particular, the CCC wishes to thank Mark Houdek with IPL's Small Business Direct Install Program and John Costakis with IPL's contractor CLEAResult.

Finally, the Creation Care Commission its very grateful for the financial support for the program provided by Mundell & Associates, August Mack Environmental, Johnson-Melloh, St. Thomas Aquinas Creation Care Ministry, Sisters of St. Benedict Beech Grove, and Sisters of St. Francis Oldenburg.

ATTACHMENTS

ATTACHMENT 1 – PROGRAM FORMS

Archdiocese of Indianapolis Creation Care Mission, Vision and Guiding Principles Sustainability Pilot Project Ten-Week Schedule Living Laudato Si Sustainability Pilot Program Covenant of Commitment Pilot Program Self-Assessment Forms

- Energy Assessment Questions
- Waste Assessment Questions
- Waste Audit Assessment
- Landscaping/Outdoor Space Assessment Questions
- Transportation Assessment Questions

ATTACHMENT 2 – PARISH/SCHOOL REPORTS Our Lady of Lourdes St. Matthews St. Mary Holy Spirit Scecina Memorial High School

ATTACHMENT 3 – SELECTED PROGRAM EVALUATION RESPONSES

Archindy Main Archindy Main Archindy Main Creation Care Commission Catholic Social Teaching Prayer, Songs, and Liturgy Advocacy Climate Change Basics Sustainable Practices NEWS Living Laudato Si' Pilot Celebrating the success of the 2019 program!

ATTACHMENT 1

PROGRAM FORMS

Archdiocese of Indianapolis Creation Care Mission, Vision and Guiding Principles Sustainability Pilot Project Ten-Week Schedule Living Laudato Si Sustainability Pilot Program Covenant of Commitment Pilot Program Self-Assessment Forms

- **Energy Assessment Questions**
- Waste Assessment Questions
- Waste Audit Assessment
- Landscaping/Outdoor Space Assessment QuestionsTransportation Assessment Questions

Archdiocese of Indianapolis Creation Care Mission, Vision and Guiding Principles

Mission

To encourage and foster the care for God's creation as a way of life and a core principle of our Catholic faith, and to minimize the Archdiocese' impact on the environment

Vision

We are an Archdiocese committed to the principles and values set forth in Pope Francis' encyclical Laudato Si'.

Parishes, schools, agencies, and organizations exhibit a culture of sustainability and consider the environmental impact of their activities.

Parishioners make good environmental choices in their homes and daily lives and understand that their choices affect the lives of others. They know the joy of living more simply and understand that creation care is a moral imperative.

Guiding Principles

All Church operations and individual activities shall be conducted in an ethical and environmentally sustainable manner.

All that we do shall be rooted in gospel values and Catholic social doctrine.

Commission for Creation Care Ministry Implementation Plan 2019

Goal: Educate Archdiocesan parishes, schools, agencies, and organizations about environmentally sustainable actions they can take

- Enhance Archdiocesan Creation Care webpages with resources and supporting information
- Contact parishes showing interest in Creation Care and support with resources
- Hold quarterly SKYPE/Conference call/webinar meetings with parish representatives
- Write environmental articles for the Criterion on a quarterly basis
- Represent the archdiocese at appropriate events and share information about Archdiocesan Creation Care
- Hold quarterly meetings of the Archdiocesan Commission for Creation Care Ministry

Goal: Minimize environmental impact from church facilities

- Recruit a group of parishes or facilities for a pilot energy audit program (target: 10)
- Provide Sustainability Interns to gather energy data and complete audits Summer 2019
- Provide parish presentations and support local Creation Care efforts

Goal: Invite parishes to participate in faith-based environmental programs

- Send regular communications to parish priests and other parish leaders highlighting specific resources and programs along with general information related to creation care
- Communicate information about resources through existing organizations within the archdiocese such as Office of Catholic Education, Youth Ministry, and DREs
- Plan an archdiocesan event for the 2019 Season of Creation (September 1 October 4); possible ideas include:
 - o Archdiocesan prayer service
 - Archdiocesan Creation Care Resource Fair
 - Laudato Si' tree plantings (Possible partner Keep Indianapolis Beautiful)
 - Laudato Si' Walk or Bike to Work/School Day (Note: International Walk to School Day for 2019 is scheduled for October 2: http://www.walkbiketoschool.org/learn-more/about-the-events/about-walk-to-school-day/)
 - Laudato Si' Clean up Day neighborhood clean up by parishes
 - Laudato Si' Zero Purchase Day Anti-consumerism day
 - Creation Care Zero Energy Day minimize energy use
- Adopt the Global Catholic Climate Movement program whereby parishes and schools can be recognized as a Laudato Si' Parish/School based on their efforts in specific areas

ATTACHMENT 1

[SUSTAINABILITY PILOT PROGRAM]

TEN-WEEK SCHEDULE - OVERVIEW

Preliminary work to be done by Creation Care Committee

- WEEK 1 INTERN ORIENTATION, PROGRAM PLANNING AND FACILITIES INTRODUCTION/TOUR
- WEEK 2 COMPLETE INITIAL ON-SITE MEETINGS, CONTINUE EDUCATIONAL OVERVIEW, AND BEGIN GOAL SETTING
- WEEK 3 -- FINALIZE GOALS AND TIMETABLE
- WEEK 4 BEGIN ASSESSMENTS
- WEEK 5 IPL/CLEARESULTS ENERGY ASSESSMENTS
- WEEK 6 CONTINUE MANAGEMENT AND OPERATIONAL ASSESSMENTS
- WEEK 7 COMPLETE MANAGEMENT AND OPERATIONAL ASSESSMENTS
- WEEK 8 BEGIN PREPARING 12-MONTH SUSTAINABILITY ACTION PLAN
- WEEK 9 -- FINALIZE 12-MONTH SUSTAINABILITY ACTION PLAN
- WEEK 10 INTERNS PREPARE AND PRESENT FINAL REPORT AND RECOMMENDATIONS TO CREATION CARE COMMITTEE, REPRESENTATIVES OF ARCHDIOCESE AND [PILOT PROGRAM] PARTICIPANTS

ARCHDIOCESE OF INDIANAPOLIS CREATION CARE COMMITTEE AND [PARISH OR SCHOOL]

LIVING LAUDATO SI'
SUSTAINABILITY PILOT PROGRAM

COVENANT OF COMMITMENT

The Archdiocese Cro	eation Care (Committee and [I	Parish or School]	enter into this	Covenant of
Commitment this _	day of	, 2019.			

OUR SHARED UNDERSTANDING

In his encyclical *Laudato Si'*, *Care of Our Common Home*, Pope Francis recognizes that climate change caused by global warming poses an urgent threat to the Earth, our common home, and to its most vulnerable inhabitants. Pope Francis admonishes that:

The effects of the present imbalance can only be reduced by our decisive action, here and now; and

Humanity is called to recognize the need for changes of lifestyle, production and consumption, in order to combat this warming.

Laudato Si', Paragraphs 161 and 23.

- ♦ The Archdiocese of Indianapolis, which encompasses nearly 13,800 square miles in 38 counties in central and southern Indiana, and is comprised of 133 parishes, 70 high schools and elementary schools, and almost a quarter of a million Roman Catholics, is committed to heed the call of Pope Francis, as evidenced by its signing of the Catholic Climate Declaration.
- ♦ We accept as our guiding principle that we must strive to conduct all Church operations in an ethical and environmentally sustainable manner.
- ♦ We acknowledge that to conduct all Church operations in an ethical and environmentally sustainable manner will require a change in the [parish or school] culture, and the recognition that all operations and ministries must consider and integrate sustainability principles in their planning and operations.
- ♦ We acknowledge that this Covenant is the first step in a process to change our culture and to begin making the changes necessary to operate ethically and in an environmentally

sustainable manner. We commit that through this Sustainability Pilot Program, we will begin this process by:

- ➤ Identifying opportunities and priorities for improving sustainability practices in [Parish or School];
- Identifying applicable best management practices for [Parish or School];
- Developing a Sustainability Action Plan for [Parish or School]; and
- Engaging all [parish or school] stakeholders in the process.
- ♦ In consideration of the above shared declarations, the Archdiocese of Indianapolis Creation Care Committee and [Parish or School] commit to each other as follows:

RESPONSIBILITIES OF CREATION CARE COMMITTEE

- 1. Coordinate and provide all aspects of the Sustainability Pilot Program, at no cost to [Parish or School], through interns provided by the Indiana Sustainability Development Program (ISDP) and Mundell & Associates, and other volunteer experts, organizations and businesses.
- 2. Work with [Parish or School] to establish specific goals for the 10-week Sustainability Pilot Program. The general framework for the 10-week program is attached as Attachment 1.
- 3. Communicate at least weekly with the primary contact person designated by [Parish or School]. Coordinate all interactions with staff, volunteers or others who have information or responsibilities relevant to the Sustainability Pilot Program with the primary contact person.
- 4. Work with [Parish or School] to establish a specific 12-month Sustainability Action Plan that reflects the priorities of [Parish or School] for implementation after the 10-week program.
- 5. Develop a methodology for tracking the Sustainability Action Plan for [Parish or School], and provide follow-up support and encouragement to [Parish or School] throughout the 12-month implementation.
- 6. Provide a final report at the end of the 10-week program documenting projects and results for [Parish or School], including an overall evaluation of each project and recommendations for future projects.

RESPONSIBILITIES OF [PARISH OR SCHOOL]

- 1. Provide a primary contact person for the ISDP and Mundell interns. This person should be familiar with the overall operation of [Parish or School] and be able to coordinate and facilitate intern interactions with staff, volunteers or others who have information or responsibilities relevant to the Sustainability Pilot Program.
- 2. Identify stakeholders, such as [parish/school] leadership, staff, etc., and specific interests of each stakeholder. Throughout the process, inform parishioners, teachers, students, and other stakeholders about the Sustainability Pilot Program, and invite participation and feedback at every opportunity.
- 3. Participate in the orientation and educational components of the Sustainability Pilot Program, the schedule and details of which will be mutually determined.
- 4. Work with ISDP and Mundell interns to establish specific goals for the 10-week Sustainability Pilot Program. See <u>Attachment 1</u>.
- 5. Provide periodic feedback to the Creation Care Committee as requested to enhance the overall experience with the interns during the Sustainability Pilot Program.
- 6. Work with ISDP and Mundell interns to establish a specific 12-month Sustainability Action Plan that reflects the priorities of [Parish or School] for implementation after the 10-week program.
- 7. Work with the Creation Care Committee for at least 12 months after the 10-week program to document operational improvements and metrics of success (e.g., energy savings, waste reduction, etc.).
- 8. Serve as case study and resource to other archdiocesan parishes or schools, as requested and appropriate.

So acknowledged and agreed this _	day of, 2019.
[PARISH OR SCHOOL]	ARCHDIOCESE OF INDIANAPOLIS CREATION CARE COMMITTEE
Ву	By / <u>Deacon Mike Braun/</u>
[Pastor or President]	Director of Pastoral Ministries

Energy Assessment Questions

Date: Parish/School:

GENERAL QUESTIONS

Lighting

Are lights turned off when daylight is bright enough?	
Has there been an effort to use energy-efficient light bulbs when	
incandescent bulbs burn out?	
Are lights/lamps/fixtures clean?	
Are blinds/curtains used to shade the building(s)? Are they closed	
at night?	
Are external lights kept on in the daytime?	
Are the lights turned off at night?	
Are gym lights turned off when not in use?	
How do you adjust classroom/hallway/kitchen spaces for	
breaks/holidays?	
Is there signage reminding staff to turn off lights when not in use?	

Additional Comments:

Heating/Cooling

	T
Provide a brief description of your HVAC system.	
Do off-hour activities extend operating house for energy-using	
systems?	
Is natural cooling (outside air) utilized?	
Are there any guidelines on indoor temperature use? How do you	
handle the thermostats on a day-to-day basis? Where are they	
located? Are they vulnerable to occupant adjustment? What are	
the settings for heating and cooling season? Is it adjusted for	
unoccupied periods?	
What's the maintenance schedule for the HVAC systems?	
Is heating/AC used in unoccupied spaces?	
Are radiators blocked by furniture or other things which can restrict	
circulation?	
Are electric space heaters used anywhere?	
Is the exhaust system operation programmed?	
Is there any sort of maintenance routine for checking leaks/cracks	
in pipes?	
Are boilers maintained on a scheduled basis?	
Is there insulation on the roof space?	
Are there any cracked windows?	
Is there evidence of issues with double glazing in windows	
(moisture between panes)?	
Do the windows/doors stay closed when heat/AC is on?	
Could the building reduce heat by closing blinds or using reflective	
film in windows?	
Is AC run at the same time as heating?	
Does the chiller operate during cold weather to provide AC?	
Do multiple AC compressors start simultaneously?	
Do multiple boilers/heaters fire simultaneously?	
Additional Comments:	I

Water

Are there evident water leaks/drips?	
Are water temperatures reduced during unoccupied periods?	
What is the hot water temperature set at?	
Are water fountains on a timer?	
Are there devices in place to conserve heated water?	

Additional Comments:

Equipment

Is equipment kept on "energy saving" mode during the day?	
Can computers be switched off during the day?	
Are the computer, fax machines, photocopiers, etc turned off at	
night?	
Can a 7-day timer be put on some of the equipment (water	
coolers, vending machines, photocopiers)?	
Do vending machines remain energized during unoccupied	
periods?	
Are fridges placed next to heat sources?	
Is the fridge thermostat working properly and set to the right temp?	
Are icemakers turned off?	
Are microwaves, coffee machines, etc. unplugged after use?	
Are any of the appliances upgraded to energy-efficient models?	
Is there signage informing staff of these energy-saving strategies?	

Waste Assessment Questions

Date: Parish/School:

GENERAL QUESTIONS

Check major waste generating activities.	Office supplies
Make a star next to the ones that generate the most waste.	Kitchen wastes (school lunches, Sunday mass, special events)
i wake a star flext to the ones that generate the most waste.	Landscaping (yard clippings)
	Shipping containers (cardboard)
	Others (please explain):
How many times does waste get collected each week?	
How much waste do you generate each week that is placed	
in a dumpster? (How many dumpsters are full?)	
Have you mapped where bins and dumpsters are located?	
What is the current waste handling cost?	
How is waste handled that's generated by the rectory?	
What do employees typically do for lunch?	
Are there vending/soda machines anywhere? How many?	
Is e-mail encouraged (rather than printing out paper)?	
Do printers have double-sided capabilities? If so, do you	
encourage double-sided copies?	
Do you buy paper/office supplies made from recycled	
content?	
What's the process for determining the need for office	
supplies?	
How much of the waste generated in a week would you	
estimate is compostable? How much is actually composted?	
Does leftover food get donated to charities?	
Do you have composting capability on-site?	
Do you reuse or repurpose anything? Explain.	
Are there any unused items (furniture, equipment, etc)	
being stored in the building that could be reused?	
How much recycled material do you estimate is generated	
each week?	
How much is actually recycled?	
Is there a recycling program in place? If yes, how often	
does recycling get collected?	
How many recycling bins are there? Where are they	
located?	
Please provide details of any waste reduction/recycling	
efforts (including special events, festivals, sporting events,	
etc).	
What percentage of your parishioners (or students, faculty,	
staff) do you estimate recycles their waste at home?	

Are there dedicated recycling bins for batteries and toner cartridges?	
Is there standardized bin signage for recycling/trash bins?	
Are there posters/other materials reminding users of good recycling practices?	
What materials would you prioritize if a recycling program was in place?	

Additional Comments:

Please list any major festivals or other events that your parish/school hosts. For each of these events, please describe: major activities at the event; what is purchased or consumed at the event; and how waste is handled at the event, including any recycling efforts.

Waste Audit Assessment

Date: Parish/School:

AREAS OF INTEREST

Recyclable items	Is this in your trash?	What Percentage?
Paper (e.g., office paper, mail, magazines, shredded paper, file folders, packing paper)	☐ Yes ☐ No	
Paper boxes (e.g. cereal, cookie and cracker boxes, supplies and electronics boxes)	☐ Yes ☐ No	
Cardboard	☐ Yes ☐ No	
Plastic bottles, jugs, cups, food containers (clean), packaging	☐ Yes ☐ No	
Metal cans and pans (rinsed) from food and beverages	☐ Yes ☐ No	
Cartons (milk and broth cartons, juice boxes)	☐ Yes ☐ No	
Glass bottles and jars from food and beverages	☐ Yes ☐ No	
Organic material (food scraps, napkins)	☐ Yes ☐ No	

Landscaping/Outdoor Space Assessment Questions

Date: Parish/School:

GENERAL QUESTIONS

How many acres does the parish own?	
Estimate the percentage of that land that is non-hard surface (no parking lots or buildings).	
Describe the landscaping on the property.	
How many trees are planted on the property? What types of	
trees are they?	
Are there flowers planted on the property?	
Are there any ponds, lakes, or natural springs on the	
property? How often is grass typically mowed?	
How are grass clippings handled?	
How is other outdoor waste (leaves, sticks, etc) handled?	
Is the lawn treated? How often and with what kind of	
materials?	
Are pesticides/fertilizers used anywhere?	
7.110	
If yes, please explain the kind of chemical used and how it is	
used on the property.	
Are there any native plants on the property?	
If so, describe the type of plant and where they are located.	
Is the lawn watered? If so, how often?	
Are the athletic fields watered? How often?	
What is the source of water used for irrigation?	
Is rainwater harvested and used for irrigation?	
How is roof water directed?	
How is runoff handled from the property? (drainage to	
stormsewers, retention/detention ponds, raingardens, etc)	
Are there sump pumps from the basements to discharge	
water, keeping the basement dry?	
What time of day is the property watered?	
Is there a sprinkler system in place? If so, is there a timer of or quick shut-off valves on the system?	
Is there a vegetable garden on the property?	
Is mulch used on the property? How much is purchased and	
how often is it purchased? What is the source of the mulch?	
Are the athletic fields grass or turf?	

Transportation Assessment Questions

Date: Parish/School:

Parish

How many families attend your parish?	
What percentage of parishioners do you estimate drive to	
Mass and other church events?	
How many do you estimate carpool?	
What percentage of parishioners do you estimate walk/bike	
to Mass and other church events?	
Are there public bus stations near your parish? How many?	
Are there bike racks around the church building? How	
many?	
What's the farthest distance anyone has to travel to church?	
Is there a vehicle for the parish priest?	
Are any of the church vehicles hybrid/electric?	
How many miles do priest/church vehicles drive in a week?	
In a year?	

Additional Comments:

School

How many employees and students drive to work/school on a daily basis?	
What's the longest distance a student/family drives to school?	
What percentage of students get picked-up/dropped-off at school by their parents?	
What time is pick-up for students? How long do parents typically wait in line to pick up their kids?	
What percentage of students walk/ride their bike to school?	
Do you have school buses? How many? What percentage of students are eligible for bus services?	
What percentage of students take the bus to school?	
How many days in a week are the school buses used? How many days in a year?	
Are there bike racks on your property? How many?	
How many students drive to school?	
Do students carpool? Is there an incentive to carpool?	
Do students pay for parking passes?	
Are there any other vehicles owned by the parish/school?	
Please list them and explain what their use(s) is/are.	

ATTACHMENT 2 PARISH/SCHOOL REPORTS

Our Lady of Lourdes
St. Matthews
St. Mary
Holy Spirit
Scecina Memorial High School

Archdiocese of Indianapolis Creation Care Commission

Living Laudato Si' Sustainability Pilot Program

Our Lady of Lourdes Catholic Church

5333 East Washington Street, Indianapolis, Indiana, 46219

Final Report

Introduction

The Creation Care Commission is a ministry of the Archdiocese of Indianapolis that is housed under Pastoral Ministries. The official mission of the Creation Care Commission is "to encourage and foster the care for God's creation as a way of life and a core principle of our Catholic faith and to minimize the Archdiocese' impact on the environment". Its vision is this: that all parishioners will live environmentally-conscious lifestyles based on the values in Pope Francis' encyclical *Laudato Si*' and, consequently, understand that creation care is a moral imperative. They are guided by the goals that everything the Archdiocese does is completed in an ethical and environmentally conscious manner, and that everything is done based on Catholic social teaching.

The inaugural sustainability program is comprised of a cohort of four parishes and one high school that are all in the same relative geographic area. These parishes and schools signed a covenant of commitment promising to cooperate with the Creation Care Commission over the ten-week pilot program and ensuing twelve-month implementation phase. Upon success of this pilot program, the Creation Care Commission will make recommendations for moving forward in expanding the sustainability program to other parishes and schools across the Archdiocese.

Facility Description

Our Lady of Lourdes Catholic Church, founded in 1910, is located on 5333 East Washington Street in downtown Irvington. Their mission statement is as follows: "We, the faith community of Our Lady of Lourdes Catholic Parish, strive to live, share, and be Christ in all we do". There are four buildings on the property: the church building, the school building, the parish center (which also functions as the rectory), and Bernadette Hall (which currently houses the pre-school and other meeting rooms).

The HVAC system for the parish consists of a few parts. There is one boiler that is used to heat both the church and the school. Several classrooms and offices have window air conditioning units, but the rest of those spaces open windows for natural cooling. In general, the HVAC system is not efficient; it does not work well because it is approximately 60 years old.

Pilot Self-Evaluation

Our Lady of Lourdes Catholic Church completed self-assessments in the following areas of operation: energy/building operations, waste management, outdoor space, and transportation. Below are key findings from each assessment.

<u>Energy and Building Operations (See Appendix I):</u> Most of the classrooms have been LED-updated, but there are still portions of the school, church, and parish center that have not been updated to LED lighting. There are signs in the bathroom and lounge reminding users to turn off

the lights when they leave the room. The light fixtures in the gym are very old, and those bulbs consume a large portion of energy. The HVAC systems are also old and doesn't work well, making it very inefficient. The computers in the computer lab and classrooms run all summer long. However, all equipment such as fax machines and photocopiers are always kept on "energy saving" mode.

Waste Management (See Appendix III, IV): Kitchen wastes make up the largest portion of waste that is directed to a landfill. There are small recycling bins in every classroom and office space, along with two large bins in common areas of the school. There is no standardized signage for recycling bins, and students often do not know what can/can't be recycled. The parish recently started recycling at their annual fall festival, and they rent bins from the Indiana Recycling Coalition for that event. There is no recycling at other school/parish events.

Outdoor Space (See Appendix VI): Less than 25% of the property owned by the parish is green space, but there are many trees, flowers, and bushes on that space. In addition, there is native landscaping in a garden which was planted by Keep Indianapolis Beautiful. Organic-based treatment is used on the lawn twice a year, and pesticides are used sparingly. A minimum of 25 yards of mulch is purchased every year from Indiana Mulch and Stone LLC for the playground and other landscaping.

<u>Transportation</u> (See Appendix VI): Of the 500 families who regularly attend Mass, it is estimated that 85% of them drive to church while 15% walk or bike. Approximately 80% of the students are picked up and dropped off by their parents, and the remaining 20% bike or walk to school. Parents can wait up to half an hour to pick up their students, but a "no idling" policy has been discussed. There are two bike racks on the property. Many of the students live nearby, which makes walking and biking to school feasible.

Energy Audit Description

Indianapolis Power and Light offers several free programs for their customers. The program utilized for this pilot program was the Small Business Direct Install Program. With this program, an energy assessment was scheduled. Installers made a site visit and conducted a free assessment to check the status of lighting in the building and check for ballast compatibility. During the assessment, they also installed complimentary LED products to ensure that savings started immediately. After the assessment, the participating location was given a rebate card so that future purchases would come with a discount. In addition to this initial visit, the Direct Install Program also offers installation of occupancy sensors through Godby. These appointments are made around a month following the energy assessment, and installation of those sensors comes at no cost to the customer.

In the energy assessment at Our Lady of Lourdes Catholic Church (see Appendix II), 93 LED T8 replacement lamps were placed in the school hallways and several areas in the church. Another 57 LED lamps were installed in the church, school, parish center, and Bernadette Hall. One prerinse spray valve and one faucet aerator were placed in the school kitchen. For the future, IPL recommended 48 LED lamps for remaining areas in all four buildings. They also recommended occupancy sensors for bathrooms, hallways, classrooms and office spaces on the property.

Proposed 12-Month Sustainability Program

Below is the action plan which was created in conjunction with stakeholders in Our Lady of Lourdes Catholic Church. An initial meeting was held to discuss goals and priorities in each

area of assessment. In attendance for that discussion was the Pastor, the Principal of the school, and a member of the Maintenance staff.

In the energy category, stakeholders prioritized LED updates on the lighting. The gym lights currently consume the most energy, and they are due to be replaced within the next few months; those lights take priority. They would also like to update lighting in the kitchen and cafeteria area from T12 to T8 LED bulbs. They are interested in investing in the IPL Green Power Option.

In the waste management category, stakeholders would like to focus on recycling in the school. They want to create standardized signage for bins, and make the bins more visible in the cafeteria. They would like to start recycling at all events, and possibly invest in reusable dishes for the staff lounge.

In the outdoor space category, stakeholders want to find a process for maintaining the garden that was installed by Keep Indianapolis Beautiful. They would also like to invest in rain barrels to harvest rainwater for watering flowers on the property.

In the transportation category, stakeholders want to encourage group rides/walks to school. Many of the students who attend the school live nearby, making this a feasible and safe option. They would also like to start educating parishioners about IndyGo and encourage parishioners to use the public bus system.

In the education category, stakeholders want to educate students, staff, and parishioners about recycling. They want to educate staff at staff retreats and meetings in order to gain buy-in for the program. They hope to strengthen the Creation Care team at the parish to gain enthusiasm and momentum with the program.

Below is the complete 12-month Sustainability Program for Our Lady of Lourdes Catholic Church:

I. Energy

Project	Cost	Timeline	Leaders	Ranking
Install occupancy sensors	\$*			Good
Update gym lights to LED	\$\$\$			Best
Update lighting in cafeteria and kitchen to LED	\$\$			Better
Update refrigerator	\$\$\$			Best
Use smart power strips	\$\$			Better
Create standardized signage to	\$			Good

remind people of			
good practices			
IPL Green	¢		Better
Power Option	\$		Dellei
Maintain			
Portfolio	c		Good
Manager	\$		G000
account			

^{*}This installation is free through Godby as part of the IPL Small Business Direct Install Program

Occupancy Sensor Installment

This ensures that lights are only turned on when someone is occupying the space; eliminates need for someone to be responsible for turning off the lights.

Gym Lights

This involves replacing old lighting in the gym to LED bulbs. It will reduce the wattage of the bulbs. It will also increase efficiency of the bulbs since the lights won't need to be turned on for as long before they fully function.

Cafeteria and Kitchen Lights

This involves replacing the old T12 fixtures in the cafeteria to T8 LED bulbs. This will greatly reduce the wattage of the bulbs and therefore reduce energy use in the cafeteria/kitchen area of the school.

Refrigerator

Replacing the refrigerator will decrease the amount of energy being used by that appliance.

Smart Power Strips

These reduce energy use by taking away "vampire energy" that often stems from appliances being plugged in even when not in use.

Standardized Signage

This will give people friendly reminders about good practices such as turning lights off when not in use and unplugging appliances when not in use. It successfully reinforces good behavior and reduces energy use from a behavior standpoint.

IPL Green Power Option

This allows the parish to specify that part of their electricity be generated by a renewable source. Currently it costs \$0.0025 per kWh (in addition to standard IPL rates), and the source is Midwestern wind farms.

Portfolio Manager

This is a free program through EPA's Energy Star. It allows the parish to track their energy savings and compare themselves to other parishes with similar size/functions. It will allow them to track their progress in energy-reducing efforts.

II. Water

Project	Cost	Timeline	Leaders	Ranking
Save water in rain barrels	\$			Good
Use "green" cleaning products	\$			Better
Install low-flow faucet aerators and showerheads	\$\$			Best
Install faucets with sensors	\$\$			Best

Rain Barrel

This allows rainwater to be collected and used, rather than using city water or water from a well.

"Green" Cleaning Products
Many modern cleaning products contain chemicals like phosphorus, which can harm water quality. Green cleaning products do not contain these chemicals.

Low-Flow Aerators/Showerheads

This reduces the amount of water that is used when a sink or shower is being used.

Faucets with Sensors

These faucets detect motion so that water is only used when needed.

III. **Waste Management**

Project	Cost	Timeline	Leaders	Ranking
Invest in reusable dishes for the staff lounge	\$\$			Best
Streamline process in Bernadette Hall	\$			Better
Create standardized bin signage for gym and events	\$			Good
Start recycling at all events	\$\$			Better
Make bins more visible in the cafeteria	\$			Good
Invest in reusable dishes	\$\$			Best

for Bernadette Hall		
Eliminate Styrofoam	\$	Better

Reusable Dishes

This involves using reusable dishes in the student lounge and taking dirty dishes to the kitchen to be washed on a daily basis. It reduces the amount of waste generated by the school.

Streamline Process

Streamlining the process for using Bernadette Hall includes creating guidelines that would be communicated to anyone using the space. It would ensure that materials are being purchased only when necessary, eliminating unnecessary waste.

Standardized Signage

This gives visual reminders of what should be recycled, which will drive behavior towards good recycling habits.

Bin Visibility

This means putting recycling bins at more prominent, visible locations of the school, especially the cafeteria. This would make it easier for students to recycle during lunch.

Reusable Dishes

This would involve replacing disposable products with reusable dishes for bereavement meals and other events that take pace in Bernadette Hall. It reduces the amount of overall waste generated by the parish.

Eliminate Styrofoam

Styrofoam cannot be recycled, so eliminating its use reduces the amount of waste heading directly into a landfill or to be burned in the city incinerator. This is also a problem because these products include toxins that are released when burned.

IV. Outdoor Space

Project	Cost	Timeline	Leaders	Ranking
Maintain KIB garden	\$\$			Better
Buy a rain barrel for watering flowers	\$			Good
Reuse flowers if possible	\$			Better

KIB Garden

The garden often goes unmanaged because there isn't a designated leader for that space. Maintaining the garden would keep the garden beautiful and would help those native plants thrive.

Rain Barrel

This allows rainwater to be collected and used, rather than using city water or water from a well.

Reuse Flowers

This involves finding ways to reuse flowers that are used for weddings and other events in the church. This could include taking them to nursing homes, hospitals, or other areas that would enjoy their presence.

V. Transportation

Project	Cost	Timeline	Leaders	Ranking
Start a "no idling" policy	\$			Good
Encourage carpooling	\$			Better
Encourage group rides/walks	\$			Best
Encourage using IndyGo and educate about its use	\$			Best

"No Idling" Policy

This involves parents shutting off their car while waiting in line to pick up their students from school. It cuts down on vehicle-related emissions.

Encourage Carpooling

This involves staff members who live relatively close to each other carpooling to work. It also includes students carpooling to school. This cuts down on vehicle-associated emissions.

Encourage Group Rides/Walks

Encouraging students to ride their bikes or walk to school together is a safe way to decrease vehicle-associated emissions while also strengthening the sense of community at the school.

<u>IndyGo</u>

The goal for this is to educate parishioners about the new bus system that is being constructed by IndyGo. It would encourage parishioners to take the bus instead of driving their single-occupant vehicle.

VI. Purchasing

Project	Cost	Timeline	Leaders	Ranking
Take inventory of all products purchased within the parish	\$			Good
Create a green purchasing policy and implement it	\$\$			Best

Buy local	•		- .
goods/services	\$		Best

Inventory

This involves taking an inventory of all goods and services that the parish purchases, as well as the source of those goods and services. This will allow the parish to see what they could potentially switch.

Green Purchasing Policy

A green purchasing policy states that products purchased will be less damaging to human health and the environment than competitors' products.

Buy Local

This means resourcing goods and services to buy from local sources. It will cut down on vehicle-associated emissions and also help support the local economy.

VII. Education

Project	Cost	Timeline	Leaders	Ranking
Host recycling workshops for parishioners, staff, students	\$\$			Better
Educate at staff retreats	\$			Better
Educate parishioners about smart ways to repurpose items	\$			Better
Monarch butterflies in the classroom	\$			Good
Host Laudato Si' workshops	\$\$			Good
Strengthen and expand Creation Care team	\$			Best
Calculate carbon footprint before and after program	\$			Best

Recycling Workshops

This will educate parishioners on issues such as what can/can't be recycled, where to take recycling, etc. It will increase recycling and decrease amount of waste being dumped into a landfill.

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Educate Staff

This involves educating staff at the beginning of the school year about the goals for the parish, as well as the projects that the parish wants to complete. It helps achieve buy-in from the school.

Educate Parishioners

Educating parishioners about recycling, as well as unique ways to reuse and repurpose things, helps parishioners start these practices in their own homes. It extends creation care beyond the parish and into individual homes.

Monarch Butterflies

This is a good opportunity to teach students about not only the life cycle of butterflies, but also about the importance of pollinators for our ecosystems.

Laudato Si' Workshops

This will provide an opportunity for parishioners to understand the importance of creation care, and will help gain buy-in for the program.

Expand Creation Care Team

Gaining more membership in the Creation Care team and increasing their scope by giving them charge of more projects will help support these projects and future endeavors in sustainability.

Carbon Footprint

This involves the parish looking at all their emission-generating activities and calculating a "footprint" for their operations. This is another way for them to get a baseline so that they can track their progress and compare their footprint at the beginning and end of the program.

Conclusions

Overall, Our Lady of Lourdes Catholic Church is currently at a moderate status. They have already started updating lights to LED bulbs. They have a recycling program in the school and recently started recycling at their annual fall festival. They have some native landscaping on their property, and have many trees located on the property as well. A portion of their students walk or ride their bike to school, and many parishioners do the same for Mass.

Key elements of their action plan include LED updates, recycling at the school, and streamlining the process for Bernadette Hall. The gym lights will be prioritized first, followed by the kitchen and cafeteria; remaining areas of the school will follow. Educating students about recycling, along with creating standardized signage for recycling bins and starting recycling at all events, will greatly increase the recycling rates in both the school and the parish. Streamlining the process for Bernadette Hall will greatly reduce the amount of waste generated by activities in the space. Educating staff at the beginning of the school year will be crucial to increasing buy-in from the school. Education parishioners and actively partaking in the Season of Creation activities will help engage the parish at large.

Attachments:

Appendix I Energy Assessment

Appendix II IPL Report

Appendix III Waste Management Assessment
Appendix IV Outdoor Space Assessment
Appendix V Transportation Assessment

Appendix I

Energy Assessment

Date: 05/28/19 **Lighting**

Are lights turned off when daylight is bright enough?	Sometimes
Has there been an effort to use energy-	LED in classrooms, incandescent in hallways,
efficient light bulbs when incandescent bulbs burn out?	incandescent in church (but working on LED); T12 in Parish Center
Are lights/lamps/fixtures clean?	Yes
Are blinds/curtains used to shade the	
building(s)? Are they closed at night?	
Are external lights kept on in the daytime?	No
Are the lights turned off at night?	Mostly; all classrooms have motion sensors
Are gym lights turned off when not in use?	No (mercury, takes a long time to get on)
How do you adjust classroom/hallway/kitchen	All lights remain off, lights only come on in the
spaces for breaks/holidays?	spaces that are being used
Is there signage reminding staff to turn off	Bathrooms, lounge
lights when not in use?	

Heating/Cooling

neating/coomig	
Do off-hour activities extend operating house	
for energy-using systems?	
Is natural cooling (outside air) utilized?	5 classrooms and offices have window AC
	units, rest use windows
Are there any guidelines on indoor	Temp "is what it is"
temperature use? How do you handle the	Machines don't get fixed properly, they get
thermostats on a day-to-day basis? Where are	fixed easily
they located? Are they vulnerable to occupant	
adjustment? What are the settings for heating	
and cooling season? Is it adjusted for	
unoccupied periods?	
What's the maintenance schedule for the	Checked regularly
HVAC systems?	
Is heating/AC used in unoccupied spaces?	
Are radiators blocked by furniture or other	No
things which can restrict circulation?	
Are electric space heaters used anywhere?	
Is the exhaust system operation programmed?	No
Is there any sort of maintenance routine for	
checking leaks/cracks in pipes?	
Are boilers maintained on a scheduled basis?	Yes; one in school for both church and school
Is there insulation on the roof space?	
Are there any cracked windows?	
Is there evidence of issues with double glazing	
in windows (moisture between panes)?	

Do the windows/doors stay closed when	
heat/AC is on?	
Could the building reduce heat by closing	
blinds or using reflective film in windows?	
Is AC run at the same time as heating?	
Does the chiller operate during cold weather to	
provide AC?	
Do multiple AC compressors start	
simultaneously?	
Do multiple boilers/heaters fire	
simultaneously?	

Additional Comments: Most HVAC systems don't work very well (they are around 60 years old); boiler isn't usually turned on until November

Water

Are there evident water leaks/drips?	
Are water temperatures reduced during	
unoccupied periods?	
What is the hot water temperature set at?	130 (guess); 120 for school
Are water fountains on a timer?	No
Are there devices in place to conserve heated	No; 3 water heaters (kitchen, school, PC) +2
water?	(rectory, church)

Equipment

Equipment	
Is equipment kept on "energy saving" mode during the day?	All machines have energy saving mode, and that mode is always on
Can computers be switched off during the	Yes, but they aren't
day?	1 co, but they dron't
Are the computer, fax machines, photocopiers, etc turned off at night?	Teacher discretion
Can a 7-day timer be put on some of the equipment (water coolers, vending machines, photocopiers)?	n/a
Do vending machines remain energized during unoccupied periods?	n/a
Are fridges placed next to heat sources?	
Is the fridge thermostat working properly and set to the right temp?	Yes
Are icemakers turned off?	
Are microwaves, coffee machines, etc. unplugged after use?	No
Are any of the appliances upgraded to energy-efficient models?	No (most appliances upgraded in 2007); last year bought a new ice machine and warming oven
Is there signage informing staff of these energy-saving strategies?	No

Additional Comments: computers run all summer (one computer lab with around 30 computers, every teacher has one in their classroom); new voltage is needed for cooling (trying to get away from boiler)

Appendix II

IPL Report

Our Lady Lourdes 5333 E WASHINGTON ST INDIANAPOLIS, IN, 46219

IPL - SMALL BUSINESS DIRECT INSTALL



Our Lady Lourdes 5333 E WASHINGTON ST INDIANAPOLIS, IN, 46219

ENERGY ASSESSMENT REPORT FOR YOUR BUSINESS

Our Lady Lourdes

Alicia Nygra
Our Lady Lourdes
5333 E WASHINGTON ST
INDIANAPOLIS, IN, 46219

PREPARED BY

Charles Byres

IPL Small Business Direct Install Program

888.982.7071

Congratulations! By requesting this Energy Assessment, you've taken an important step towards improving your building's energy efficiency and managing your energy use. Effective energy management can result in lower electricity consumption, reduced operating costs, and increased reliability of building systems.

Our Lady Lourdes 5333 E WASHINGTON ST INDIANAPOLIS, IN, 46219

DIRECT INSTALL PROJECT SAVINGS SUMMARY

During your assessment, energy efficient products were installed to help you start saving energy today. The table below summarizes your efficiency project including efficient equipment, estimated energy savings, and energy cost savings.

Equipment Installed	Quantity	Installed Product Value (\$)	Estimated Energy Savings (kWh)*
Pre-Rinse Spray Valves	1	\$75	7629
Faucet Aerators	1	\$8	141
LED T8 Replacement Lamps	93	\$1395	7340
LED Lamps	57	\$810	12246

These savings are just the start of your potential energy management opportunities.

NEXT STEPS

In the following report, you will find a summary of additional energy saving recommended for your business. For each recommendation, we provide estimates for potential energy savings, energy cost savings, and incentives available through the IPL Small Business Direct Install Program.

Moving forward with these recommendations can save additional energy and improve your business's bottom line. With project incentives and program support, starting your next energy saving project is easy.

Ready to start saving? Work with your contractor to find the project mix that works best for you and find out how the IPL Business Energy Incentives Program can help.

Please visit IPLpower.com/business energy incentives/ or contact us at 888.982.7071 with any questions.

Our Lady Lourdes 5333 E WASHINGTON ST INDIANAPOLIS, IN, 46219

IPL - SMALL BUSINESS DIRECT INSTALL

Energy Efficiency Opportunity Assessment Report

Based on an analysis of your building's existing equipment we recommend completing the following energy efficiency projects. For each recommendation, we've estimated the cost after incentives, energy savings, and simple payback after program incentives. These estimates will help you plan for and complete your next efficiency project.

RECOMMENDED ENERGY EFFICIENCY PROJECTS

Recommended Equipment	Efficient Equipment Type	Quantity	Estimated Cost After Incentives (\$)	Estimated Energy Savings (kWh)	Simple Payback After Incentives (Years)
Lighting Replacements	Lighting	48.00	6356	116148	4.1
LED Lighting Controls	Lighting	20.00	1433	1776	8.1
Refrigerator Freezer	Refrigeration	4.00	8610	5455	2.8

Lighting

LEDs are a highly efficient lighting technology that can significantly reduce your energy costs. LEDs are long lasting, which can help reduce maintenance costs compared to traditional lighting systems with lamps and ballasts. Additionally, LEDs are typically compatible with lighting controls, such as Occupancy Sensors and Daylighting Controls. Adding lighting controls to your LED project will help further reduce energy use and operating costs.

To qualify for rebates, LED screw-in lamps need to be ENERGY STAR listed, and LED tubes and fixtures need to be listed on the DesignLights Consortium's Qualified Product List. Please confirm the current program guidelines for complete eligibility requirements before purchasing your LEDs.

Refrigeration

Commercial refrigeration systems are often overlooked as a source of energy savings and operations cost reductions. Upgrading your refrigeration system with efficient components such as high-efficiency motors, anti-sweat heat controls, open case covers, and LED case lights will significantly reduce the amount of energy used by this system.

PROGRAM RESOURCES AND DISCLAIMER

Contact Information:

IPL - SMALL BUSINESS DIRECT INSTALL

Phone: 888.982.7071

Email: info@IPLrebates.com

Please visit <u>IPLpower.com/business_energy_incentives/</u> for current rebate offerings or additional information on project requirements and terms of program participation.

The report recommendations provided are based on responses to a survey on building systems, equipment, and occupancy completed by a site representative. Estimated energy savings, energy costs savings, and recommended project costs are based on average program values. Project costs, savings, rebates, and paybacks are not guaranteed. Program offerings, availability, and rebate levels are subject to change at any time.

IPL reserves the right to change elements of the program without notice.

Appendix III

Waste Management Assessment

Date: 06/17/19 **General Questions**

General Questions	
Check major waste generating activities.	Office supplies
Make a stay payt to the spee that gapagets the	X_ Kitchen wastes (school lunches,
Make a star next to the ones that generate the most waste.	Sunday mass, special events)
most waste.	Landscaping (yard clippings) Shipping containers (cardboard)
	Others (please explain):
	Others (picase explain).
How many times does waste get collected	Twice a week
each week?	
How much waste do you generate each week	One dumpster of waste, one dumpster of
that is placed in a dumpster? (How many	recycling
dumpsters are full?)	
Have you mapped where bins and dumpsters	
are located?	M4.700/
What is the current waste handling cost?	\$4,700/year
How is waste handled that's generated by the	
rectory? What do employees typically do for lunch?	Postory hring lunch from home
What do employees typically do for lunch? Are there vending/soda machines anywhere?	Rectory – bring lunch from home No
How many?	INO
Is e-mail encouraged (rather than printing out	Yes
paper)?	163
Do printers have double-sided capabilities? If	Yes, yes.
so, do you encourage double-sided copies?	
Do you buy paper/office supplies made from	Yes
recycled content?	
What's the process for determining the need	
for office supplies?	
How much of the waste generated in a week	
would you estimate is compostable?	
How much is actually composted?	
Does leftover food get donated to charities?	
Do you have composting capability on-site?	Rectory collects compost material and it is picked up
Do you reuse or repurpose anything? Explain.	
Are there any unused items (furniture,	Yes
equipment, etc) being stored in the building	
that could be reused?	
How much recycled material do you estimate	
is generated each week?	
How much is actually recycled?	

Is there a recycling program in place? If yes, how often does recycling get collected?	Yes, once a week
How many recycling bins are there? Where are they located?	Parish office-each office has a paper recycling bin, plus 2 other bins in common spaces. Rectory has recycling bins located in kitchen.
Please provide details of any waste reduction/recycling efforts (including special events, festivals, sporting events, etc).	Recycling containers used for festival
What percentage of your parishioners (or students, faculty, staff) do you estimate recycles their waste at home?	
Are there dedicated recycling bins for batteries and toner cartridges?	No
Is there standardized bin signage for recycling/trash bins?	No
Are there posters/other materials reminding users of good recycling practices?	Yes
What materials would you prioritize if a recycling program was in place?	Paper, plastic, aluminum in the school (cafeteria)

Waste Audit

Recyclable items	Is this in your trash?	What Percentage?
Paper (e.g., office paper, mail, magazines, shredded paper, file folders, packing paper)	☐ Yes ⊠ No	100%
Paper boxes (e.g. cereal, cookie and cracker boxes, supplies and electronics boxes)	□ Yes ⊠ No	100%
Cardboard	☐ Yes ☒ No	100%
Plastic bottles, jugs, cups, food containers (clean), packaging	☐ Yes ☒ No	90%
Metal cans and pans (rinsed) from food and beverages	☐ Yes ☒ No	90%
Cartons (milk and broth cartons, juice boxes)	☐ Yes ☒ No	90%
Glass bottles and jars from food and beverages	☐ Yes ☒ No	90%
Organic material (food scraps, napkins)	⊠ Yes □ No	

Appendix IV

Waste Management Assessment: Festivals and Ministries

Fall Festival

What festival are you in charge of?	OLL Fall Festival
Describe the activities at your event.	Carnival rides, Silent Auction, Major Raffle, food, beer, Texas Poker, Rummage Sale, kids' games, entertainment
What materials are you responsible for purchasing?	Table coverings, kids' prizes, plates, silverware, napkins, soda, water, fliers, banner & more that I can't think of at the moment
What kind of materials do you buy? (what they are made of, reusable/disposable, etc)	Almost all are one-time use; prizes go home with kids
Is there any sort of recycling present at the event? Please explain.	Yes. Last year cans and signs were received from an organization so cans and plastic bottles could be recycled. Cardboard is recycled.
Describe how waste is handled at the event.	We get an extra dumpster for trash for the event. We rent two port-a-pots for human waste (probably not what you meant by waste).

Irvington Brewfest

irvington Brewiest	
What festival are you in charge of?	Irvington BrewFest
Describe the activities at your event.	Beer Sampling / drinking
	Food Trucks
	Music
What materials are you responsible for	Table coverings
purchasing?	Decor (fabric, candles, centerpieces, lights)
What kind of materials do you buy? (what they	plastic table covering (disposable)
are made of, reusable/disposable, etc)	All kinds of materials for decor (mostly reused
	from year-to-year)
	In the past, breweries have brought their own
	plastic tasting cups.
Is there any sort of recycling present at the	No
event? Please explain.	
Describe how waste is handled at the event.	Trash cans

Additional Comments:

I have considered doing something else besides plastic tasting cups for beer sampling. There are advantages and disadvantages to having the samples poured directly into the pint glass that every participant receives. Haven't decided what I'll be doing this year yet.

Family Promise

How often does your parish host families for Family Promise?	OLL partners with six other churches to host families one week each quarter. OLL's commitment is to care for the families one day each quarter.
Please describe the facility that family members are housed in.	Up to four families are hosted at Irvington Presbyterian Church (IPC). The beds are transported with the families.
What materials are you responsible for purchasing for Family Promise?	The host churches are responsible for providing linens (twin XL) for the beds (except pillows/pillow cases), towels/washcloths, backup toiletries, dinner, breakfast and bagged lunch provisions.
How is waste handled while family members are present?	All linens are washed and reused. The toiletries are sent with families to the next host group. Unused dinner food is used for lunches. Other unused food is used for the many other ministries that meet at IPC.
How much waste is generated during a typical time period that the families are hosted?	Regular dishes are used for meals and are washed. The main waste generated with this ministry would be food containers, like milk/juice jugs and cardboard boxes.
Is there recycling at the facility? Is it encouraged?	Food waste containers are currently thrown in the regular trash. I did not see a recycling container in the kitchen area but will check with the church to see if it's in a different location.

Bereavement Meals Ministry and Hospitality Ministry (Interview Notes)

- Fewer meals this year than in the past
 - o 9 this fiscal year (last meal was in March), 13 previous year, 12 year before that
- Amount of people served varies on the family
 - o Smallest was 12 people; some families hit 75-100
- Parish provides dishes, drinks, entrées
- Donations are from a call list, most of the stuff is homemade
- Asked that dishes are donated in disposable aluminum pans
 - Will sometimes wash and reuse aluminum pans
 - o Occasionally, people will bring their own instead of using aluminum
- · Volunteers help set up and prepare food
- All paper products or plastic, disposable
 - o Cash and Carry is the supplier

- No longer use Styrofoam cups
- Compostable plates for dinner, thinner plates for dessert
- Try to be smart with cutting desserts (let people self-serve so that they aren't wasting plates cutting the desserts up-front)
- Leftover food is donated to Wheeler Mission (women and children's center as well as main facility)
- People would probably be willing to help wash dishes
 - At other events, dishes are washed by volunteers; sometimes there are too many people trying to wash dishes
 - Biggest problem would be when there are large families or more people present at the funeral meal
 - Time is an issue
- Wouldn't want to do glassware for dishes (cups)
- No dishwasher might consider investing in one?
- Share supplies with other ministries
 - Coffee and donuts ministry (contact Sally Bennett)
 - Open for rental (graduation parties and other events)
 - Staff meetings, professional development days
 - RCIA (contact Rachael Vroom)
 - Spiritual Journey Committee (Feast and Faith events)
 - Men's prayer group
 - Ash Wednesday meal
 - Ceramic bowls
 - People wash dishes afterwards
 - Lenten soup dines (rotate around Irvington community churches, OLL hosts once or twice per year)
 - Ceramic bowls
 - People wash dishes afterwards
 - Christmas dinner
 - May use kitchen in cafeteria, then transport food
 - Halloween spooky organ/music concert (offer fellowship afterwards)
 - Serve around 70 people
- ******Purchasing isn't streamlined ****** (biggest issue)
 - No accountability with supplies in the space
 - No communication about use of space
- Plastic tablecloths, get thrown away
- 1 or 2 full bags of trash after each meal
- No recycling for meals
 - o Not much is produced
 - o Anything that is recyclable is taken home by coordinator of meals to recycle
- Supplies are shared, but each ministry has their own budget as a result, stuff expires and has to be thrown out (coffee canisters, condiments)

Appendix V

Outdoor Space Assessment

Date: 06/25/19

Date: 06/25/19	
How many acres does the parish own?	Unsure
Estimate the percentage of that land that is non-hard surface (no parking lots or buildings).	Less than 25%
Describe the landscaping on the property.	Grass, flowers, small garden (KIB, received a grant about 15 years ago)
How many trees are planted on the property?	At least 30-40; some are original (1909)
What types of trees are they?	including oak tree in front of church
Are there flowers planted on the property?	yes
Are there any ponds, lakes, or natural springs on the property?	no
How often is grass typically mowed?	Once/week
How are grass clippings handled?	Left on grass
How is other outdoor waste (leaves, sticks, etc) handled?	Bagged and disposed of
Is the lawn treated? How often and with what kind of materials?	Yes. Fall & Spring. Organic based treatment.
Are pesticides/fertilizers used anywhere?	Fertilizer used on grass Sparingly use pesticides (hire a company to
If yes, please explain the kind of chemical	spray in the kitchen for Board of Health
used and how it is used on the property.	purposes)
Are there any native plants on the property?	KIB garden
If so, describe the type of plant and where they	9
are located.	
Is the lawn watered? If so, how often?	No
Are the athletic fields watered? How often?	N/A
What is the source of water used for irrigation?	Hose
Is rainwater harvested and used for irrigation?	No
How is roof water directed?	Storm drains
How is runoff handled from the property? (drainage to stormsewers, retention/detention	Stormdrains
ponds, raingardens, etc)	
Are there sump pumps from the basements to	No; drains in most of the basements
discharge water, keeping the basement dry?	,
What time of day is the property watered?	N/A
Is there a sprinkler system in place? If so, is	No
there a timer of or quick shut-off valves on the	
system?	
Is there a vegetable garden on the property?	No
Is mulch used on the property? How much is	Yes. Purchased annually (at least 25 yards a
purchased and how often is it purchased?	year); used for playground and landscaping;
What is the source of the mulch?	Indiana Mulch and Stone LLC
Are the athletic fields grass or turf?	N/A

Appendix VI

Transportation Assessment

Date: 06/25/19

Parish

How many families attend your parish?	700 registered, about 500 show up to Mass
What percentage of parishioners do you	85%
estimate drive to Mass and other church	
events?	
How many do you estimate carpool?	1%
What percentage of parishioners do you	15%
estimate walk/bike to Mass and other church	
events?	
Are there public bus stations near your parish?	Yes, but people typically don't ride the bus
How many?	
Are there bike racks around the church	Yes; 2
building? How many?	
What's the farthest distance anyone has to	20 miles (guess)
travel to church?	
Is there a vehicle for the parish priest?	He has his own
Are any of the church vehicles hybrid/electric?	No
How many miles do priest/church vehicles	
drive in a week? In a year?	

School

How many employees and students drive to work/school on a daily basis?	30 teachers/staff, 230 students (190 families)
What's the longest distance a student/family drives to school?	20 miles
What percentage of students get picked-up/dropped-off at school by their parents?	80%
What time is pick-up for students? How long do parents typically wait in line to pick up their kids?	Pick-up at 3:05; start arriving at 2:45 and are usually gone by 3:15; "no idling" encouraged
What percentage of students walk/ride their bike to school?	20%
Do you have school buses? How many? What percentage of students are eligible for bus services?	No
What percentage of students take the bus to school?	0
How many days in a week are the school buses used? How many days in a year?	0
Are there bike racks on your property? How many?	2
How many students drive to school?	0

Do students carpool? Is there an incentive to carpool?	N/A
Do students pay for parking passes?	N/A
Are there any other vehicles owned by the parish/school? Please list them and explain what their use(s) is/are.	No

Archdiocese of Indianapolis Creation Care Commission Living Laudato Si' Sustainability Pilot Program St. Matthew Catholic Church 4100 East 56th Street, Indianapolis, Indiana, 46220

Final Report

Introduction

The Creation Care Commission is a ministry of the Archdiocese of Indianapolis that is housed under Pastoral Ministries. The official mission of the Creation Care Commission is "to encourage and foster the care for God's creation as a way of life and a core principle of our Catholic faith and to minimize the Archdiocese' impact on the environment". Its vision is this: that all parishioners will live environmentally-conscious lifestyles based on the values in Pope Francis' encyclical *Laudato Si*' and, consequently, understand that creation care is a moral imperative. They are guided by the goals that everything the Archdiocese does is completed in an ethical and environmentally conscious manner, and that everything is done based on Catholic social teaching.

The inaugural sustainability program is comprised of a cohort of four parishes and one high school that are all in the same relative geographic area. These parishes and schools signed a covenant of commitment promising to cooperate with the Creation Care Commission over the ten-week pilot program and ensuing twelve-month implementation phase. Upon success of this pilot program, the Creation Care Commission will make recommendations for moving forward in expanding the sustainability program to other parishes and schools across the Archdiocese.

Facility Description

St. Matthew Catholic Church is located at 4100 East 56th Street on the northeast side of Indianapolis. The parish has around 1,100 families and approximately 350 students in attendance at the school. There are three main functions of the parish: the church, the school, and the parish office. These are all housed in the same building.

The HVAC system at the church is programmed. Every room and large area has an HVAC controller that is linked to a master control. Temperature in the room is controlled at a local level through set points, and there is limited adjustment available to the occupants. Universal programs such as occupied and unoccupied schedules are managed through the master control.

Pilot Self Evaluation

St. Matthew Catholic Church completed self-assessments in the following areas of operation: energy/building operations, waste management, outdoor space, and transportation. Below are key findings from each assessment.

<u>Energy and Building Operations (See Appendix I):</u> The parish is starting the process of replacing incandescent bulbs with LED bulbs. Gym lights are usually turned off when the space is unoccupied, but lights in many parts of the building remain turned on during operating hours. The HVAC system is controlled by a computer; however, unoccupied spaces still receive

heated/chilled air. Systems are maintained on a scheduled basis. There is no signage reminding parishioners, staff, and students of good practices.

<u>Waste Management (See Appendix III):</u> Most of the waste generated from the parish comes from organic waste (especially school lunches). Currently, the parish and school only recycle paper. There are no recycling bins in classrooms; however, there are two large bins placed on every floor of the school. Additionally, bins have standardized signage. There are also dedicated recycling bins for batteries and toner cartridges. There's no signage reminding parishioners, staff, and students about good recycling practices.

<u>Outdoor Space (See Appendix IV):</u> The parish owns three acres, and about 30% of that is green space. Grass is mowed weekly. Yard waste is hauled away. Runoff is directed to the storm sewers. The football field is watered every night, but no other part of the property is watered. In addition, there is a vegetable garden located on the property. No pesticides or fertilizers are used either on the garden or the lawn.

<u>Transportation (See Appendix V):</u> Of the 1,200 families that attend St. Matthew Catholic Church, most of them drive to Mass and other events. 100% of employees drive to work, and 100% of students are picked up and dropped off by their parents. The parish is located at the corner of a busy intersection that does not have crosswalks, which makes walking or biking to school dangerous for students. Pick-up for the school starts at 3 PM, and parents typically wait no longer than fifteen minutes.

Energy Audit Description

Indianapolis Power and Light offers several free programs for their customers. The program utilized for this pilot program was the Small Business Direct Install Program. With this program, an energy assessment was scheduled. Two installers came to the site and conducted a free assessment to check the status of lighting in the building and check for ballast compatibility. During the assessment, they also installed complimentary LED products to ensure that savings started immediately. After the assessment, the participating location was given a rebate card so that future purchases would come with a discount. In addition to this initial visit, the Direct Install program also offers installation of occupancy sensors through Godby. These appointments are made around a month following the energy assessment, and installation of those sensors comes at no cost to the customer.

In the energy assessment at St. Matthew Catholic Church (see Appendix II), 115 LED T8 replacement lamps were installed in the cafeteria. An additional 47 LED lamps were placed in the narthex and in the Daily Mass chapel. IPL recommended that the parish install another 129 LED replacements for the remaining bulbs that have not been converted. They further recommended occupancy sensors for areas such as restrooms and hallways. Lastly, they recommended the installment of more efficient appliances such as a new fryer, dishwasher, oven, and refrigerator freezer.

Proposed 12-Month Sustainability Program

Below is the action plan which was created in conjunction with stakeholders in St. Matthew Catholic Church. An initial meeting was held to discuss goals and priorities in each area of assessment. In attendance for that discussion was the Pastor, the Pastoral Assistant/Operations Manager, the Business Manager, the Administrative Assistant, and a member of Maintenance.

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In the energy category, there is much room for growth and progress. The priority for stakeholders is to replace the roof lights and gym lights with LED bulbs, since those fixtures are currently the ones consuming the most energy. They also want to be more diligent with keeping thermostat settings closer to the recommended temperatures during unoccupied periods.

In the waste management category, plastic recycling is the key focus. Currently, the school only recycles paper, and there aren't recycling bins in every classroom. The goal is to start recycling plastic and increase the amount of recycling bins present in the building.

In the outdoor space category, stakeholders would like to start composting. This would go well with the vegetable garden on the property. They would also like to plant a pollinator garden with a focus on plants that are attractive to butterflies.

In the transportation category, the opportunities are limited. The parish is located at the corner of a busy intersection without crosswalks, which makes biking and walking to school unsafe for students. However, stakeholders discussed creating a "no idling" policy for parents who are waiting to pick up their students.

In the education category, stakeholders would like to focus on teaching students the importance of not being wasteful (with an emphasis on food waste). To assist in this, they considered the possibility of having the students conduct a food waste audit during lunch. They would also like to host Laudato Si' presentations for parishioners to educate others about the importance of creation care.

Below is the complete 12-month Sustainability Program for Holy Spirit Catholic Church:

I. Energy

Project	Cost	Timeline	Leaders	Ranking
Install occupancy sensors	\$*			Good
Update roof lights to LED	\$			Better
Update gym lights to LED	\$			Better
LED replacements in rest of the school and church	\$\$			Better
Replace old appliances with Energy Star alternatives	\$\$\$			Best
Set thermostat temperatures closer to recommended	\$			Best
Use smart power	\$\$			Better

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strips in offices and classrooms		
Create signage reminding about good behaviors	\$	Good
Invest in IPL Green Power Option	\$	Better
Maintain Portfolio Manager account	\$	Good

^{*}This installation is free through Godby as part of the IPL Small Business Direct Install Program

Occupancy Sensor Installment

This ensures that lights are only turned on when someone is occupying the space; eliminates need for someone to be responsible for turning off the lights

LED Replacements

This involves replacing old incandescent/fluorescent bulbs with LED bulbs. LED bulbs use less energy (which will also save money in the long run). LED bulbs can be purchased with a rebate since the parish completed IPL's Direct Install Program.

Energy Star Efficient Appliances

This involves buying appliances that have the Energy Star logo on them. These appliances use less energy than their counterparts. The parish can also receive a rebate through IPL for purchasing these appliances.

Adjust Thermostat Temperatures

This involves setting thermostat heat/cool settings closer to outside temperature during unoccupied periods. This would ensure that space isn't being unnecessarily heated/cooled and would also save energy.

Smart Power Strips

These reduce energy use by taking away "vampire energy" that often stems from appliances being plugged in even when not in use.

Standardized Signage

This will give people friendly reminders about good practices such as turning lights off when not in use and unplugging appliances when not in use. It successfully reinforces good behavior and reduces energy use from a behavior standpoint.

IPL Green Power Option

This allows the parish to specify that part of their electricity be generated by a renewable source. Currently it costs \$0.0025 per kWh (in addition to standard IPL rates), and the source is Midwestern wind farms.

Portfolio Manager

This is a free program through EPA's Energy Star. It allows the parish to track their energy savings and compare themselves to other parishes with similar size/functions. It will allow them to track their progress in energy-reducing efforts.

II. Water Use

Project	Cost	Timeline	Leaders	Ranking
Save water in rain barrels	\$			Good
Use "green" cleaning products	\$			Better
Install low-flow faucet aerators and showerheads	\$\$			Best
Install faucets with sensors	\$\$			Best

Rain Barrel

This allows rainwater to be collected and used, rather than using city water or water from a well.

"Green" Cleaning Products

Many modern cleaning products contain chemicals like phosphorus, which can harm water quality. Green cleaning products do not contain these chemicals.

Low-Flow Aerators/Showerheads

This reduces the amount of water that is used when a sink or shower is being used.

Faucets with Sensors

These faucets detect motion so that water is only used when needed.

III. Waste Management

Project	Cost	Timeline	Leaders	Ranking
Start recycling plastic	\$			Better
Create standardized signage for bins	\$			Good
Place recycling bins in every classroom and office*	\$			Good
Start composting in the kitchen	\$			Best
Eliminate Styrofoam products	\$\$			Best

^{*}An alternate option is place only recycling bins in every room and place trash cans in more central locations (such as main areas or hallways) to make recycling easier than throwing waste in the trash cans

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Recycle Plastic

This involves creating a standardized recycling program for plastic to decrease the amount of plastic waste that heads to a landfill or incinerator.

Standardized Signage

This gives visual reminders of what should be recycled, which will drive behavior towards good recycling habits

Recycling Bin Placement

This involves placing recycling bins in every classroom and office space along with the trash cans. It creates easier access to recycling and will increase recycling in the parish.

Composting

This involves collecting organic waste such as peels, grass, and leaves. Compost provides essential nutrients for plant growth and saves food waste and other organic waste from being directed to a landfill.

Eliminate Styrofoam

Styrofoam cannot be recycled, so eliminating its use reduces the amount of waste heading directly into a landfill or to be burned in the city incinerator. This is also a problem because these products include toxins that are released when burned.

IV. Outdoor Space

Project	Cost	Timeline	Leaders	Ranking
Start composting	\$			Better
Plant native landscaping	\$\$			Better
Plant pollinator garden	\$\$\$			Best
Buy a rain barrel to harvest water for garden	\$\$			Good

Composting

This involves collecting organic waste such as peels, grass, and leaves. Compost provides essential nutrients for plant growth and saves food waste and other organic waste from being directed to a landfill.

Native Landscaping

Native plants are adapted to the conditions of Indiana, so they require less water and less maintenance. They also provide a habitat for wildlife.

Pollinator Garden

This provides a habitat and food for pollinators, which are vital to the cultivation of flowers, plants, and crops.

Rain Barrel

This allows rainwater to be collected and used, rather than using city water or water from a well.

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V. Transportation

Project	Cost	Timeline	Leaders	Ranking
Start a "no idling" policy	\$			Better
Encourage staff carpooling	\$			Good

"No Idling" Policy

This involves parents shutting off their car while waiting in line to pick up their students from school. It cuts down on vehicle-related emissions.

Encourage Carpooling

This involves staff members who live relatively close to each other carpooling to work. It cuts down on vehicle-associated emissions.

VI. Purchasing

Project	Cost	Timeline	Leaders	Ranking
Take inventory of all products purchased within the parish (and source)	\$			Good
Create a green purchasing policy and implement it	\$\$			Best
Buy local goods/services	\$			Best

Inventory

This involves taking an inventory of all goods and services that the parish purchases, as well as the source of those goods and services. This will allow the parish to see what they could potentially switch.

Green Purchasing Policy

A green purchasing policy states that products purchased will be less damaging to human health and the environment than competitors' products.

Buy Local

This means resourcing goods and services to buy from local sources. It will cut down on vehicle-associated emissions and also help support the local economy.

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VII. Education

Project	Cost	Timeline	Leaders	Ranking
Teach students				
about the	\$			Good
importance of not	Ψ			Good
wasting				
Conduct a food	\$\$			Better
waste audit	ΨΨ			Detter
Incorporate				
sustainability-	\$\$			Best
related topics	ΨΨ			Dest
into curriculum				
Monarch				
butterflies in the	\$\$			Good
classroom				
Educate staff at				
staff	\$			Best
meetings/retreats				
Laudato Si'				
presentations for	\$\$			Best
parishioners				
Calculate carbon				
footprint before	\$			Better
and after	Ψ			Dellei
program				

Teach about Wastefulness

Students will be taught the importance of conserving resources such as food and paper. It would integrate this thought process into their daily habits and lifestyle.

Food Waste Audit

Students will keep track of all the food being thrown away at lunch for a week. The goal is to show students how much food is wasted, explain how that food could be feeding hungry people, and therefore decrease food waste in the school.

Sustainability Curriculum

This involves teaching more ecology-based topics. It would introduce sustainability to students and allow teachers to explain how creation care is an important part of Catholic Social Teaching.

Monarch Butterflies

This is a good opportunity to teach students about not only the life cycle of butterflies, but also about the importance of pollinators for our ecosystems.

Educate Staff

This involves educating staff at the beginning of the school year about the goals for the parish, as well as the projects that the parish wants to complete. It helps achieve buy-in from the school.

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Carbon Footprint

This involves the parish looking at all their emission-generating activities and calculating a "footprint" for their operations. This is another way for them to get a baseline so that they can track their progress and compare their footprint at the beginning and end of the program.

Conclusions

St. Matthew Catholic Church is currently at a beginning status. They are starting the process of replacing old light fixtures with LED bulbs. They have a programmable thermostat system, which makes it easier to control those temperatures. They also recycle paper as a parish/school system, and there are some efforts being made to recycle plastic in the rectory. They have an organic vegetable garden that is used to collect produce for food pantries, and water only the athletic fields.

Key elements of the action plan for St. Matthew Catholic Church are increased energy efficiency and increased recycling efforts. Their priorities are to replace old roof lighting and gym lighting with LED bulbs, which will greatly decrease their energy use. They also want to start recycling plastic, which will decrease their carbon footprint by decreasing the amount of waste headed to a landfill or incinerator. Educating staff at the beginning of the school year will be crucial to increasing buy-in from the school. Education parishioners and actively partaking in the Season of Creation activities will help engage the parish at large.

Attachments:

Appendix I Energy Assessment

Appendix II IPL Report

Appendix IV Waste Management Assessment
Appendix IV Outdoor Space Assessment
Appendix V Transportation Assessment

Appendix I

Energy Assessment

Date: 07/11/19 **Lighting**

Are lights turned off when daylight is bright enough?	No
Has there been an effort to use energy- efficient light bulbs when incandescent bulbs burn out?	Yes
Are lights/lamps/fixtures clean?	Yes
Are blinds/curtains used to shade the	Yes
building(s)? Are they closed at night?	
Are external lights kept on in the daytime?	No
Are the lights turned off at night?	Yes
Are gym lights turned off when not in use?	Sometimes
How do you adjust classroom/hallway/kitchen	Lights are turned off
spaces for breaks/holidays?	
Is there signage reminding staff to turn off	No
lights when not in use?	

Heating/Cooling

Do off-hour activities extend operating house for energy-using systems?	Yes
Is natural cooling (outside air) utilized?	Yes
Are there any guidelines on indoor temperature use? How do you handle the thermostats on a day-to-day basis? Where are they located? Are they vulnerable to occupant adjustment? What are the settings for heating and cooling season? Is it adjusted for unoccupied periods?	HVAC system is controlled by computer
What's the maintenance schedule for the HVAC systems?	Checked weekly or daily
Is heating/AC used in unoccupied spaces?	Yes
Are radiators blocked by furniture or other things which can restrict circulation?	No
Are electric space heaters used anywhere?	No
Is the exhaust system operation programmed?	Yes
Is there any sort of maintenance routine for checking leaks/cracks in pipes?	Yes
Are boilers maintained on a scheduled basis?	Yes
Is there insulation on the roof space?	Yes
Are there any cracked windows?	No

Is there evidence of issues with double glazing in windows (moisture between panes)?	No
Do the windows/doors stay closed when heat/AC is on?	Yes
Could the building reduce heat by closing blinds or using reflective film in windows?	No
Is AC run at the same time as heating?	No
Does the chiller operate during cold weather to provide AC?	As needed
Do multiple AC compressors start simultaneously?	No
Do multiple boilers/heaters fire simultaneously?	No

Water

Are there evident water leaks/drips?	No
Are water temperatures reduced during	No
unoccupied periods?	
What is the hot water temperature set at?	
Are water fountains on a timer so they only	No
provide cold water when building is occupied?	
Are there devices in place to conserve heated	Yes
water?	

Equipment

—	
Is equipment kept on "energy saving" mode during the day?	Yes
Can computers be switched off during the day?	Yes
Are the computer, fax machines, photocopiers, etc turned off at night?	Yes
Can a 7-day timer be put on some of the equipment (water coolers, vending machines, photocopiers)?	No
Do vending machines remain energized during unoccupied periods?	None
Are fridges placed next to heat sources?	No
Is the fridge thermostat working properly and set to the right temp?	Yes
Are icemakers turned off?	No
Are microwaves, coffee machines, etc. unplugged after use?	Yes
Are any of the appliances upgraded to energy-efficient models?	Yes
Is there signage informing staff of these energy-saving strategies?	No

Appendix II

IPL Report

St. Mathews Catholic Church 4050 E 56TH ST INDIANAPOLIS, IN, 46220

IPL - SMALL BUSINESS DIRECT INSTALL



St. Mathews Catholic Church 4050 E 56TH ST INDIANAPOLIS, IN, 46220

ENERGY ASSESSMENT REPORT FOR YOUR BUSINESS

St. Mathews Catholic Church

PREPARED FOR

Alicia Nygra St. Mathews Catholic Church 4050 E 56TH ST INDIANAPOLIS, IN, 46220 PREPARED BY

Charles Byres

IPL Small Business Direct Install Program

888.982.7071

Congratulations! By requesting this Energy Assessment, you've taken an important step towards improving your building's energy efficiency and managing your energy use. Effective energy management can result in lower electricity consumption, reduced operating costs, and increased reliability of building systems.

St. Mathews Catholic Church 4050 E 56TH ST INDIANAPOLIS, IN, 46220

DIRECT INSTALL PROJECT SAVINGS SUMMARY

During your assessment, energy efficient products were installed to help you start saving energy today. The table below summarizes your efficiency project including efficient equipment, estimated energy savings, and energy cost savings.

Equipment Installed	Quantity	Installed Product Value (\$)	Estimated Energy Savings (kWh)*
LED T8 Replacement Lamps	115	\$1725	9077
LED Lamps	47	\$1326	14081

These savings are just the start of your potential energy management opportunities.

NEXT STEPS

In the following report, you will find a summary of additional energy saving recommended for your business. For each recommendation, we provide estimates for potential energy savings, energy cost savings, and incentives available through the IPL Small Business Direct Install Program.

Moving forward with these recommendations can save additional energy and improve your business's bottom line. With project incentives and program support, starting your next energy saving project is easy.

Ready to start saving? Work with your contractor to find the project mix that works best for you and find out how the IPL Business Energy Incentives Program can help.

Please visit IPLpower.com/business_energy_incentives/ or contact us at 888.982.7071 with any questions.

St. Mathews Catholic Church 4050 E 56TH ST INDIANAPOLIS, IN, 46220

IPL - SMALL BUSINESS DIRECT INSTALL

Energy Efficiency Opportunity Assessment Report

Based on an analysis of your building's existing equipment we recommend completing the following energy efficiency projects. For each recommendation, we've estimated the cost after incentives, energy savings, and simple payback after program incentives. These estimates will help you plan for and complete your next efficiency project.

RECOMMENDED ENERGY EFFICIENCY PROJECTS

Recommended Equipment	Efficient Equipment Type	Quantity	Estimated Cost After Incentives (\$)	Estimated Energy Savings (kWh)	Simple Payback After Incentives (Years)
Lighting Replacements	Lighting	129.00	1700	52713	5.5
LED Lighting Controls	Lighting	6.00	430	533	8.1
Fryers	Appliances & Food Service Equipment	1.00	4640	3052	1.1
Dishwashers	Appliances & Food Service Equipment	1.00	9500	22801	0.2
Ovens	Appliances & Food Service Equipment	1.00	2700	3235	2.2
Refrigerator Freezer	Refrigeration	3.00	5960	2669	1.5

Lighting

LEDs are a highly efficient lighting technology that can significantly reduce your energy costs. LEDs are long lasting, which can help reduce maintenance costs compared to traditional lighting systems with lamps and ballasts. Additionally, LEDs are typically compatible with lighting controls, such as Occupancy Sensors and Daylighting Controls. Adding lighting controls to your LED project will help further reduce energy use and operating costs.

To qualify for rebates, LED screw-in lamps need to be ENERGY STAR listed, and LED tubes and fixtures need to be listed on the DesignLights Consortium's Qualified Product List. Please confirm the current program guidelines for complete eligibility requirements before purchasing your LEDs.

Appliances & Food Service Equipment

Consider upgrading to highly efficient ENERGY STAR commercial appliances and food service equipment, which will save energy and reduce maintenance costs. Plus, many types of ENERGY STAR food service equipment will qualify for program rebates. Check with your vendor about available rebates before making your purchase.

St. Mathews Catholic Church 4050 E 56TH ST INDIANAPOLIS, IN, 46220

PROGRAM RESOURCES AND DISCLAIMER

Contact Information:

IPL - SMALL BUSINESS DIRECT INSTALL

Phone: 888.982.7071

Email: info@IPLrebates.com

Please visit IPL-power.com/business_energy_incentives/ for current rebate offerings or additional information on project requirements and terms of program participation.

The report recommendations provided are based on responses to a survey on building systems, equipment, and occupancy completed by a site representative. Estimated energy savings, energy costs savings, and recommended project costs are based on average program values. Project costs, savings, rebates, and paybacks are not guaranteed. Program offerings, availability, and rebate levels are subject to change at any time.

IPL reserves the right to change elements of the program without notice.

Appendix III

Waste Management Assessment

Date: 07/11/19 **General Questions**

Check major waste generating activities.	Office supplies
Make a standard to the constitution of the	x Kitchen wastes (school lunches,
Make a star next to the ones that generate the	Sunday mass, special events)
most waste.	Landscaping (yard clippings)
	Shipping containers (cardboard)
	Others (please explain):
How many times does waste get collected	Everyday
each week?	Lveryddy
How much waste do you generate each week	2 x'n
that is placed in a dumpster? (How many	2 X 11
dumpsters are full?)	
Have you mapped where bins and dumpsters	No
are located?	
What is the current waste handling cost?	
How is waste handled that's generated by the	Dumpster
rectory?	Bumpotor
What do employees typically do for lunch?	Bring lunch
Are there vending/soda machines anywhere?	No
How many?	
Is e-mail encouraged (rather than printing out	Yes
paper)?	
Do printers have double-sided capabilities? If	Yes
so, do you encourage double-sided copies?	
Do you buy paper/office supplies made from	Yes
recycled content?	
What's the process for determining the need	As needed
for office supplies?	
How much of the waste generated in a week	
would you estimate is compostable?	
How much is actually composted?	
Does leftover food get donated to charities?	Yes
Do you have composting capability on-site?	No
Do you reuse or repurpose anything? Explain.	No
Are there any unused items (furniture,	No
equipment, etc) being stored in the building	
that could be reused?	
How much recycled material do you estimate	None
is generated each week?	
How much is actually recycled?	
Is there a recycling program in place? If yes,	Paper

how often does recycling get collected?	
How many recycling bins are there? Where are they located?	Large container per floor
Please provide details of any waste reduction/recycling efforts (including special events, festivals, sporting events, etc).	Large container outside
What percentage of your parishioners (or students, faculty, staff) do you estimate recycles their waste at home?	50
Are there dedicated recycling bins for batteries and toner cartridges?	Yes
Is there standardized bin signage for recycling/trash bins?	Yes
Are there posters/other materials reminding users of good recycling practices?	no
What materials would you prioritize if a recycling program was in place?	

Waste Audit

Recyclable items	Is this in your trash?	What Percentage?
Paper (e.g., office paper, mail, magazines, shredded paper, file folders, packing paper)	☐ Yes ☒ No	
Paper boxes (e.g. cereal, cookie and cracker boxes, supplies and electronics boxes)	□ Yes ⊠ No	
Cardboard	☐ Yes ☒ No	
Plastic bottles, jugs, cups, food containers (clean), packaging	☐ Yes ☒ No	
Metal cans and pans (rinsed) from food and beverages	☐ Yes ☒ No	
Cartons (milk and broth cartons, juice boxes)	⊠ Yes □ No	
Glass bottles and jars from food and beverages	☐ Yes ☒ No	
Organic material (food scraps, napkins)	⊠ Yes □ No	

Appendix IV

Outdoor Space Assessment

Date: 07/11/19

Date: 07/11/19	
How many acres does the parish own?	3
Estimate the percentage of that land that is	1
non-hard surface (no parking lots or buildings).	
Describe the landscaping on the property.	
How many trees are planted on the property?	
What types of trees are they?	
Are there flowers planted on the property?	Yes
Are there any ponds, lakes, or natural springs on the property?	No
How often is grass typically mowed?	Weekly
How are grass clippings handled?	
How is other outdoor waste (leaves, sticks, etc) handled?	Hauled away
Is the lawn treated? How often and with what kind of materials?	
Are pesticides/fertilizers used anywhere?	No
If yes, please explain the kind of chemical	
used and how it is used on the property.	
Are there any native plants on the property?	No
If so, describe the type of plant and where they	
are located.	
Is the lawn watered? If so, how often?	Football field; night 7 days
Are the athletic fields watered? How often?	Refer to above
What is the source of water used for irrigation?	
Is rainwater harvested and used for irrigation?	No
How is roof water directed?	Out to drain
How is runoff handled from the property?	Drain to stormsewers
(drainage to stormsewers, retention/detention	
ponds, raingardens, etc)	
Are there sump pumps from the basements to	Yes
discharge water, keeping the basement dry?	Francis sulpinht
What time of day is the property watered?	Evening/night
Is there a sprinkler system in place? If so, is there a timer of or quick shut-off valves on the	
system?	
Is there a vegetable garden on the property?	Yes
	163
Is mulch used on the property? How much is	Donated
purchased and how often is it purchased?	
What is the source of the mulch?	
Are the athletic fields grass or turf?	Grass

Appendix V

Transportation Assessment

Date: 07/11/19

Parish

1200
70
0
1
No
No
People from downtown ,12 miles
His own
No

School

30:1331	
How many employees and students drive to work/school on a daily basis?	100% employees, 0 students
What's the longest distance a student/family drives to school?	
What percentage of students get picked-up/dropped-off at school by their parents?	100% grade school
What time is pick-up for students? How long do parents typically wait in line to pick up their kids?	3 pm; 15 minutes
What percentage of students walk/ride their bike to school?	None
Do you have school buses? How many? What percentage of students are eligible for bus services?	No
What percentage of students take the bus to school?	n/a
How many days in a week are the school buses used? How many days in a year?	n/a
Are there bike racks on your property? How many?	No
How many students drive to school?	None

Do students carpool? Is there an incentive to	None
carpool?	
Do students pay for parking passes?	No
Are there any other vehicles owned by the	No
parish/school? Please list them and explain	
what their use(s) is/are.	

Archdiocese of Indianapolis Creation Care Commission

Living Laudato Si' Sustainability Pilot Program

St. Mary Catholic Church

311 North New Jersey Street, Indianapolis, Indiana, 46204

Final Report

Introduction

The Creation Care Commission is a ministry of the Archdiocese of Indianapolis that is housed under Pastoral Ministries. The official mission of the Creation Care Commission is "to encourage and foster the care for God's creation as a way of life and a core principle of our Catholic faith and to minimize the Archdiocese' impact on the environment". Its vision is this: that all parishioners will live environmentally-conscious lifestyles based on the values in Pope Francis' encyclical *Laudato Si*' and, consequently, understand that creation care is a moral imperative. They are guided by the goals that everything the Archdiocese does is completed in an ethical and environmentally conscious manner, and that everything is done based on Catholic social teaching.

The inaugural sustainability program is comprised of a cohort of four parishes and one high school that are all in the same relative geographic area. These parishes and schools signed a covenant of commitment promising to cooperate with the Creation Care Commission over the ten-week pilot program and ensuing twelve-month implementation phase. Upon success of this pilot program, the Creation Care Commission will make recommendations for moving forward in expanding the sustainability program to other parishes and schools across the Archdiocese.

Facility Description

St. Mary Catholic Church was founded in 1858. Their current building, located on 311 N New Jersey Street in downtown Indianapolis, was built in 1910. Their mission statement is as follows: "St. Mary Parish, Indianapolis, is a welcoming Catholic Community of faith that embraces our diversity. Inspired by Word and Sacrament, we proclaim the Good News of Jesus Christ in service to all". They proudly serve the Lockerbie neighborhood and the immigrant community and serve around 900 families. The parish staff is small, with around five members.

Currently, there are two functioning buildings on St. Mary's property: the church building and the Marian Center, which houses the parish offices, meeting rooms, etc. They also have a rectory building on the property that is not currently being used and was not assessed for this pilot program. There is no school associated with the parish.

The HVAC system for the parish consists of ten different components. One boiler is located in the basement of the church, and it just heats the church. That boiler is approximately two years old. There are four air conditioning units in the church; two in the west side and two in the east side. The two units in the east side are rooftop units. In the west side, they are located in choir loft. All of those units are around 20 years old. The Marian Center has five HVAC units. The basement has one unit that is located outside in the playground and just heats/cools the basement. The first floor has one unit in the west and one unit in the east. The second floor mirrors the first floor.

Pilot Self Evaluation

St. Mary Catholic Church completed self-assessments in the following areas of operation: energy/building operations, waste management, outdoor space, and transportation. Below are key findings from each assessment.

Energy and Building Operations (See Appendix I): Most of the lighting in the parish has been updated to LED. There is also signage in the bathrooms and the kitchen reminding people to turn the lights off after use. There are manual thermostats in each room in the Marian Center and church. There were cracks in many of the windows of the church that were fixed shortly after the assessment. All computers and printers are kept in "energy saving" mode when possible and turned off at night. There is one icemaker that is turned on once every few weeks to get ice and store it for later use. Appliances are not unplugged after use. The refrigerator is energy-efficient.

Waste Management (See Appendix III): Office supplies generate the most waste, but recycling is in place for those materials. Currently, the parish recycles paper, plastic, and aluminum. They also recycle materials such as oil, ink cartridges, and batteries. There is standardized signage on all the bins. Very little organic waste is generated. There are meals every Sunday after Mass (200-300 every week), and disposable paper/plastic/Styrofoam products are used at those events. Recycling at the events is also minimal due to lack of education.

<u>Outdoor Space (See Appendix IV):</u> The parish has very little outdoor space. They are landlocked in downtown Indianapolis, so the landscaping is minimal. There are a few patches of grass and a few trees. There are also potted flowers near the front door. They have a small fountain in their Our Lady of Guadalupe prayer garden. Grass is mowed weekly and left on the ground. They have no other outdoor waste. They receive two or three yards of mulch every year from a local landscaping company that is donated by volunteers.

<u>Transportation (See Appendix V):</u> There are approximately 2,000 families registered at the parish, and around 80% of them drive to Mass and other events. The remaining 20% walk or ride bikes. Many of the families, especially in the Hispanic community, drive far distances to Mass every week. Many of them also have large families, which makes carpooling difficult.

Energy Audit Description

Indianapolis Power and Light offers several free programs for their customers. The program utilized for this pilot program was the Small Business Direct Install Program. With this program, an energy assessment was scheduled. Two installers came to the site and conducted a free assessment to check the status of lighting in the building and check for ballast compatibility. During the assessment, they also installed complimentary LED products to ensure that savings started immediately. After the assessment, the participating location was given a rebate card so that future purchases would come with a discount. In addition to this initial visit, the Direct Install program also offers installation of occupancy sensors through Godby. These appointments are made around a month following the energy assessment, and installation of those sensors comes at no cost to the customer.

In the energy assessment at St. Mary Catholic Church (see Appendix II), four LED T8 replacement lamps were placed in office/classroom spaces in the Marian Center. An additional 20 LED lamps were installed around the Marian Center and the narthex of the church building. One pre-rinse spray valve and three faucet aerators were placed in the kitchen area, which is on

the bottom floor of the Marian Center. IPL recommended the replacement of around six more LED lamps for the church and the installment of occupancy sensors in remaining areas.

Proposed 12-Month Sustainability Program

Below is the action plan which was created in conjunction with stakeholders in St. Mary Catholic Church. An initial meeting was held to discuss goals and priorities in each area of assessment. In attendance for that discussion was the Facilities Manager. The discussion notes were later reviewed by the Pastor.

In the energy category, stakeholders want to create standardized signage reminding people to turn off lights when not being used, unplug appliances after use, etc.

In the waste management category, stakeholders want to reduce the use of disposable dishes and utensils as much as possible. They want to eliminate the use of Styrofoam products at events and replace those products with plastic or compostable options. They would also like to increase recycling at events and look into the possibility of investing in reusable dishes.

In the education category, stakeholders hope to educate their parishioners about the importance of recycling, as well as what can/cannot be recycled. They also hope to educate parishioners about the broader importance of creation care.

Two areas of assessment do not have major goals attached to them. Due to the landlocked situation of the property, there is very limited green space with no room for improvement in the outdoor space category. There is also no room for improvement in the transportation category. St. Mary Catholic Church does not have a full-time school, so there's no school-related transportation. In addition, most of the parishioners come from far distances and have a large family, which makes it hard to carpool.

Below is the complete 12-month Sustainability Program for St. Mary Catholic Church:

I. Energy

Project	Cost	Timeline	Leaders	Ranking (Good, Better, Best)
Create signage reminding people of good practices	\$			Good
Use smart power strips in office spaces	\$\$			Better
Invest in IPL Green Power Option	\$			Better
Maintain Portfolio Manager account	\$			Good

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Standardized Signage

This will give people friendly reminders about good practices such as turning lights off when not in use and unplugging appliances when not in use. It successfully reinforces good behavior and reduces energy use from a behavior standpoint

Smart Power Strips

These reduce energy use by taking away "vampire energy" that often stems from appliances being plugged in even when not in use.

IPL Green Power Option

This allows the parish to specify that part of their electricity be generated by a renewable source. Currently it costs \$0.0025 per kWh (in addition to standard IPL rates), and the source is Midwestern wind farms.

Portfolio Manager

This is a free program through EPA's Energy Star. It allows the parish to track their energy savings and compare themselves to other parishes with similar size/functions. It will allow them to track their progress in energy-reducing efforts.

II. Water Use

Project	Cost	Timeline	Leaders	Ranking
Use "green" cleaning products	\$			Better
Install low-flow				
faucet aerators	\$\$			Best
and showerheads				
Install faucets with sensors	\$\$			Best

"Green" Cleaning Products

Many modern cleaning products contain chemicals like phosphorus, which can harm water quality. Green cleaning products do not contain these chemicals.

Low-Flow Aerators/Showerheads

This reduces the amount of water that is used when a sink or shower is being used.

Faucets with Sensors

These faucets detect motion so that water is only used when needed.

III. Waste Management

Project	Cost	Timeline	Leaders	Ranking
Reduce use of disposable goods at events	\$			Better
Eliminate use of Styrofoam	\$			Good

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products			
Invest in reusable dishes for events	\$\$		Best
Increase recycling at events	\$		Better

Reduce Disposable Goods

This involves replacing disposable, single-use plastic utensils and dishes with reusable dishes that can be washed. It reduces the amount of waste produced by the church.

Eliminate Styrofoam

Styrofoam cannot be recycled, so eliminating its use reduces the amount of waste heading directly into a landfill or to be burned in the city incinerator. This is also a problem because these products include toxins that are released when burned.

Reusable Dishes

Buying reusable dishes that can be used for mercy meals and other events reduces the amount of waste generated by the parish.

Recycling at Events

Recycling paper, plastic, and aluminum at after-Mass meals will reduce the amount of waste generated at these events that is directed to a landfill or incinerator.

IV. Purchasing

Project	Cost	Timeline	Leaders	Ranking
Take inventory of all products purchased within the parish	\$			Good
Create a green purchasing policy and implement it	\$\$			Best
Buy local goods/services	\$			Best

<u>Inventory</u>

This involves taking an inventory of all goods and services that the parish purchases, as well as the source of those goods and services. This will allow the parish to see what they could potentially switch.

Green Purchasing Policy

A green purchasing policy states that products purchased will be less damaging to human health and the environment than competitors' products.

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Buy Local

This means resourcing goods and services to buy from local sources. It will cut down on vehicle-associated emissions and also help support the local economy.

V. Education

Project	Cost	Timeline	Leaders	Ranking
Recycling workshops	\$			Better
Laudato Si' presentations for parishioners	\$			Good
Create educational materials	\$\$			Best

Recycling Workshops

This involves hosting workshops that teach parishioners the importance of recycling, materials that can/cannot be recycled, etc. This will help increase recycling rates at events.

Laudato Si' Presentations

This involves educating parishioners about the importance of creation care as a faith issue. It will increase buy-in from parishioners.

Educational Materials

Creating handouts and other materials for parishioners about sustainability topics such as recycling will help parishioners start these best practices in their own homes.

Conclusion

St. Mary Catholic Church is at a mature status. All their buildings are LED-updated and are prudent with their energy use. They have recycling for paper, plastic and aluminum in their parish center. Staff members also find locations to recycle non-conventional waste (such as light bulbs and other materials). Their small staff ensures successful communication and successful efforts to reduce energy, water, and waste are successful.

Key elements in the action plan for St. Mary Catholic Church include waste management and education. They hope to eliminate the use of Styrofoam and disposable products at their Sunday meals. They also hope to educate parishioners, especially the Hispanic community, on the importance of recycling and other sustainability efforts. Focusing on hosting educational opportunities after Mass on Sundays will be crucial for gaining parish involvement, since most parishioners are only able to travel to the church on Sunday.

Attachments:

Appendix I Energy Assessment

Appendix II IPL Report

Appendix III Waste Management Assessment Appendix IV Outdoor Space Assessment

Appendix V Transportation Assessment

Appendix I

Energy Assessment

Date: 05/28/19 **Lighting**

Are lights turned off when daylight is bright enough?	Yes; lights turned off after Mass
Has there been an effort to use energy- efficient light bulbs when incandescent bulbs burn out?	Church is all LED-updated, most of the Marian Center is too
Are lights/lamps/fixtures clean?	Yes
Are blinds/curtains used to shade the	No
building(s)? Are they closed at night?	
Are external lights kept on in the daytime?	No
Are the lights turned off at night?	Yes
Are gym lights turned off when not in use?	n/a
How do you adjust classroom/hallway/kitchen	n/a
spaces for breaks/holidays?	
Is there signage reminding staff to turn off	Yes (bathrooms, kitchen)
lights when not in use?	Not in church

Additional Comments: motion sensors in Marian Center

Heating/Cooling

Do off-hour activities extend operating house	No
for energy-using systems?	
Is natural cooling (outside air) utilized?	Yes sometimes
Are there any guidelines on indoor temperature use? How do you handle the thermostats on a day-to-day basis? Where are they located? Are they vulnerable to occupant adjustment? What are the settings for heating and cooling season? Is it adjusted for unoccupied periods?	Thermostat in each room (6 years old), all manual Cooling: 70 occupied, 75 unoccupied Heating: 65 occupied, 68 unoccupied
What's the maintenance schedule for the HVAC systems?	Twice a year for maintenance Check-ups occur more frequently
Is heating/AC used in unoccupied spaces?	no
Are radiators blocked by furniture or other things which can restrict circulation?	No
Are electric space heaters used anywhere?	No
Is the exhaust system operation programmed?	
Is there any sort of maintenance routine for checking leaks/cracks in pipes?	Yes
Are boilers maintained on a scheduled basis?	Yes, as recommended *One boiler located in church basement, it is around 2-4 years old
Is there insulation on the roof space?	Yes

Are there any cracked windows?	No (yes in church, but will have those fixed next week)
Is there evidence of issues with double glazing in windows (moisture between panes)?	No
Do the windows/doors stay closed when heat/AC is on?	Yes
Could the building reduce heat by closing blinds or using reflective film in windows?	Yes, not currently used
Is AC run at the same time as heating?	No
Does the chiller operate during cold weather to provide AC?	No
Do multiple AC compressors start simultaneously?	Yes
Do multiple boilers/heaters fire simultaneously?	yes

Water

One leak in church roof, but in pipes
120-130

Equipment

Equipment	
Is equipment kept on "energy saving" mode during the day?	Yes, always used
Can computers be switched off during the day?	Computers are switched off at night (3 total in building)
Are the computer, fax machines, photocopiers, etc turned off at night?	Yes
Can a 7-day timer be put on some of the equipment (water coolers, vending machines, photocopiers)?	n/a
Do vending machines remain energized during unoccupied periods?	n/a
Are fridges placed next to heat sources?	No
Is the fridge thermostat working properly and set to the right temp?	Yes
Are icemakers turned off?	Yes, only turned on one day every few weeks, ice packed and stored in freezer
Are microwaves, coffee machines, etc. unplugged after use?	No
Are any of the appliances upgraded to energy-efficient models?	Refrigerator is energy-efficient; appliances are not very old and don't need replaced
Is there signage informing staff of these energy-saving strategies?	no

Appendix II

IPL Report

St. Mary's Catholic Church 317 N NEW JERSEY ST INDIANAPOLIS, IN, 46204

IPL - SMALL BUSINESS DIRECT INSTALL



St. Mary's Catholic Church 317 N NEW JERSEY ST INDIANAPOLIS, IN, 46204

ENERGY ASSESSMENT REPORT FOR YOUR BUSINESS

St. Mary's Catholic Church

Alicia Nygra
St. Mary's Catholic Church
317 N NEW JERSEY ST
INDIANAPOLIS, IN, 46204

PREPARED BY

Charles Byres

IPL Small Business Direct Install Program

888.982.7071

Congratulations! By requesting this Energy Assessment, you've taken an important step towards improving your building's energy efficiency and managing your energy use. Effective energy management can result in lower electricity consumption, reduced operating costs, and increased reliability of building systems.

St. Mary's Catholic Church 317 N NEW JERSEY ST INDIANAPOLIS, IN, 46204

DIRECT INSTALL PROJECT SAVINGS SUMMARY

During your assessment, energy efficient products were installed to help you start saving energy today. The table below summarizes your efficiency project including efficient equipment, estimated energy savings, and energy cost savings.

Equipment Installed	Quantity	Installed Product Value (\$)	Estimated Energy Savings (kWh)*
Pre-Rinse Spray Valves	1	\$75	7629
Faucet Aerators	3	\$24	424
LED T8 Replacement Lamps	4	\$60	316
LED Lamps	20	\$360	4817

These savings are just the start of your potential energy management opportunities.

NEXT STEPS

In the following report, you will find a summary of additional energy saving recommended for your business. For each recommendation, we provide estimates for potential energy savings, energy cost savings, and incentives available through the IPL Small Business Direct Install Program.

Moving forward with these recommendations can save additional energy and improve your business's bottom line. With project incentives and program support, starting your next energy saving project is easy.

Ready to start saving? Work with your contractor to find the project mix that works best for you and find out how the IPL Business Energy Incentives Program can help.

Please visit IPLpower.com/business_energy_incentives/ or contact us at 888.982.7071 with any questions.

St. Mary's Catholic Church 317 N NEW JERSEY ST INDIANAPOLIS, IN, 46204

IPL - SMALL BUSINESS DIRECT INSTALL

Energy Efficiency Opportunity Assessment Report

Based on an analysis of your building's existing equipment we recommend completing the following energy efficiency projects. For each recommendation, we've estimated the cost after incentives, energy savings, and simple payback after program incentives. These estimates will help you plan for and complete your next efficiency project.

RECOMMENDED ENERGY EFFICIENCY PROJECTS

Recommended Equipment	Efficient Equipment Type	Quantity	Estimated Cost After Incentives (\$)	Estimated Energy Savings (kWh)	Simple Payback After Incentives (Years)
Lighting Replacements	Lighting	6.00	1362	19350	0.7
LED Lighting Controls	Lighting	10.00	767	148	51.8

Lighting

LEDs are a highly efficient lighting technology that can significantly reduce your energy costs. LEDs are long lasting, which can help reduce maintenance costs compared to traditional lighting systems with lamps and ballasts. Additionally, LEDs are typically compatible with lighting controls, such as Occupancy Sensors and Daylighting Controls. Adding lighting controls to your LED project will help further reduce energy use and operating costs.

To qualify for rebates, LED screw-in lamps need to be ENERGY STAR listed, and LED tubes and fixtures need to be listed on the DesignLights Consortium's Qualified Product List. Please confirm the current program guidelines for complete eligibility requirements before purchasing your LEDs.

PROGRAM RESOURCES AND DISCLAIMER

Contact Information:

IPL - SMALL BUSINESS DIRECT INSTALL

Phone: 888.982.7071

Email: info@IPLrebates.com

Please visit <u>IPLpower.com/business_energy_incentives/</u> for current rebate offerings or additional information on project requirements and terms of program participation.

The report recommendations provided are based on responses to a survey on building systems, equipment, and occupancy completed by a site representative. Estimated energy savings, energy costs savings, and recommended project costs are based on average program values. Project costs, savings, rebates, and paybacks are not guaranteed. Program offerings, availability, and rebate levels are subject to change at any time.

IPL reserves the right to change elements of the program without notice.

Appendix III

Waste Management Assessment

Date: 06/04/19 **General Questions**

General Questions	
Check major waste generating activities. Make a star next to the ones that generate the most waste.	x Office supplies *x Kitchen wastes (school lunches, Sunday mass, special events)x Landscaping (yard clippings)x Shipping containers (cardboard)x Others (please explain):
How many times does waste get collected each week?	Twice; Monday and Thursday
How much waste do you generate each week that is placed in a dumpster? (How many dumpsters are full?)	2
Have you mapped where bins and dumpsters are located?	Yes
What is the current waste handling cost?	Not sure
How is waste handled that's generated by the rectory?	Priest does not live there, but the space is being rented out; counted as church waste, recycled when possible
What do employees typically do for lunch?	Bring their own lunch or go home
Are there vending/soda machines anywhere? How many?	No
Is e-mail encouraged (rather than printing out paper)?	Yes
Do printers have double-sided capabilities? If so, do you encourage double-sided copies?	Yes
Do you buy paper/office supplies made from recycled content?	Janitorial supplies – yes Office supplies – not sure
What's the process for determining the need for office supplies?	Buy in bulk a few times per year
How much of the waste generated in a week would you estimate is compostable? How much is actually composted?	None
Does leftover food get donated to charities?	No, not a lot produced
Do you have composting capability on-site?	No
Do you reuse or repurpose anything? Explain.	
Are there any unused items (furniture,	No
equipment, etc) being stored in the building	
that could be reused?	
How much recycled material do you estimate	80% of what is recyclable is recycled
is generated each week?	
How much is actually recycled?	
Is there a recycling program in place? If yes, how often does recycling get collected?	Yes; paper, plastic, aluminum

How many recycling bins are there? Where are they located?	8 large bins in Marian Center, 6 in church Smaller bins placed in both areas as well
Please provide details of any waste reduction/recycling efforts (including special events, festivals, sporting events, etc).	emaner zane placea in zeni areae ae wen
What percentage of your parishioners (or students, faculty, staff) do you estimate recycles their waste at home?	Not sure, guess around 50%
Are there dedicated recycling bins for batteries and toner cartridges?	Collected in church and taken somewhere to recycle
Is there standardized bin signage for recycling/trash bins?	Yes, same on every bin
Are there posters/other materials reminding users of good recycling practices?	Yes
What materials would you prioritize if a recycling program was in place?	Batteries, ink cartridges, oil

Additional Comments: Oil is recycled at Autozone. Computers and ink cartridges are recycled. Fr. Carlton is very adamant about recycling.

Please list any major festivals or other events that your parish/school hosts. For each of these events, please describe: major activities at the event; what is purchased or consumed at the event; and how waste is handled at the event, including any recycling efforts.

There are groups that make and sell food every Sunday after Mass (200 or 300 meals a week). Recycling is minimal, and all utensils/plates/cups are disposable. A lot of it is Styrofoam. There are also events during Holy Week, Guadalupe celebration, 4th of July, and Christmas.

Waste Audit

Recyclable items	Is this in your trash?	What Percentage?
Paper (e.g., office paper, mail, magazines, shredded	⊠ Yes □ No	20%
paper, file folders, packing		
paper)		
Paper boxes (e.g. cereal, cookie and cracker boxes, supplies and electronics	☐ Yes ☒ No	
boxes)		
Cardboard	☐ Yes ⊠ No	All recycled
Plastic bottles, jugs, cups,		10%
food containers (clean),		
packaging		
Metal cans and pans	☐ Yes ☒ No	Minimal
(rinsed) from food and		
beverages		
Cartons (milk and broth	☐ Yes ☒ No	
cartons, juice boxes)		
Glass bottles and jars from	☐ Yes ☒ No	
food and beverages		
Organic material (food	⊠ Yes □ No	10%
scrans nankins)		

Appendix IV

Outdoor Space Assessment

Date: 06/25/19

Date: 06/25/19	
How many acres does the parish own?	Unsure (guess 1)
Estimate the percentage of that land that is non-hard surface (no parking lots or buildings).	5%
Describe the landscaping on the property.	Minimal; a few trees and grass
How many trees are planted on the property? What types of trees are they?	2 or 3
Are there flowers planted on the property?	Yes; pots in front of church and some in garden
Are there any ponds, lakes, or natural springs on the property?	Small fountain in Guadalupe garden
How often is grass typically mowed?	Weekly
How are grass clippings handled?	Left on ground
How is other outdoor waste (leaves, sticks, etc) handled?	n/a
Is the lawn treated? How often and with what kind of materials?	Twice a year with fertilizer
Are pesticides/fertilizers used anywhere?	Fertilizer on lawn
If yes, please explain the kind of chemical	Round-Up used very sparingly in grotto area;
used and how it is used on the property.	weeds are pulled by hand in most areas
Are there any native plants on the property?	No
If so, describe the type of plant and where they are located.	
Is the lawn watered? If so, how often?	No
Are the athletic fields watered? How often?	n/a
What is the source of water used for irrigation?	n/a
Is rainwater harvested and used for irrigation?	n/a
How is roof water directed?	Grass or storm drains
How is runoff handled from the property? (drainage to stormsewers, retention/detention ponds, raingardens, etc)	Storm drains
Are there sump pumps from the basements to discharge water, keeping the basement dry?	No
What time of day is the property watered?	n/a
Is there a sprinkler system in place? If so, is	No
there a timer of or quick shut-off valves on the	
system?	
Is there a vegetable garden on the property?	No
Is mulch used on the property? How much is purchased and how often is it purchased? What is the source of the mulch?	Yes; once a year, 2 or 3 yards, brought by volunteers from local landscaping company
Are the athletic fields grass or turf?	n/a

Appendix V

Transportation Assessment

Date: 06/25/19

Parish

How many families attend your parish?	2,000 registered
What percentage of parishioners do you	80%
estimate drive to Mass and other church	
events?	
How many do you estimate carpool?	1%
What percentage of parishioners do you	20%
estimate walk/bike to Mass and other church	
events?	
Are there public bus stations near your parish?	Yes, but people usually don't ride the bus
How many?	
Are there bike racks around the church	Yes, two
building? How many?	
What's the farthest distance anyone has to	45 minutes
travel to church?	
Is there a vehicle for the parish priest?	He has his own vehicle
Are any of the church vehicles hybrid/electric?	No
How many miles do priest/church vehicles	30 per week
drive in a week? In a year?	

Archdiocese of Indianapolis Creation Care Commission

Living Laudato Si' Sustainability Pilot Program

Holy Spirit Catholic Church

7243 East 10th Street, Indianapolis, Indiana 46219

Final Report

Introduction

The Creation Care Commission is a ministry of the Archdiocese of Indianapolis that is housed under Pastoral Ministries. The official mission of the Creation Care Commission is "to encourage and foster the care for God's creation as a way of life and a core principle of our Catholic faith and to minimize the Archdiocese' impact on the environment". Its vision is this: that all parishioners will live environmentally-conscious lifestyles based on the values in Pope Francis' encyclical *Laudato Si*' and, consequently, understand that creation care is a moral imperative. They are guided by the goals that everything the Archdiocese does is completed in an ethical and environmentally conscious manner, and that everything is done based on Catholic social teaching.

The inaugural sustainability program is comprised of a cohort of four parishes and one high school that are all in the same relative geographic area. These parishes and schools signed a covenant of commitment promising to cooperate with the Creation Care Commission over the ten-week pilot program and ensuing twelve-month implementation phase. Upon success of this pilot program, the Creation Care Commission will make recommendations for moving forward in expanding the sustainability program to other parishes and schools across the Archdiocese.

Facility Description

Holy Spirit Catholic Church, established in 1946, is located at 7243 E 10th St on the east side of Indianapolis. They have around 2,000 families and around 400 students in attendance at the school. There are four buildings on the property: the church building, the school building, the parish center, and the rectory.

The HVAC system for the church consists of multiple units. The church has two rooftop units that provide chilled air and heating. The chapel and two vestibules each have a rooftop unit that does the same thing (however, one of the vestibule units is currently not working). The rectory has a forced air furnace and air conditioning unit. The main school building has boilers that provide heating to the VAV units in the classrooms. There's a large AC unit on the west wall that also provides cooling during summer. The primary school building has a boiler/VAV system for heating the restrooms and classrooms; there is also a large heating and AC unit for supplemental heating and cooling. The daycare/garage/pre-k building has a forced air furnace and heat pumps, as well as a rooftop AC unit. The parish center has a boiler system that heats a hydronic baseboard heater system along with several unit heaters in the offices and kitchen areas. There's a chilled water system in the parish center that is currently not functioning, so there are window units in some offices and kitchen areas for cooling. There's a portable AC unit in the basement meeting room. There are also two rooftop units for cooling the offices and conference rooms on the second floor. Repairs have not been pursued due to cost and upcoming renovations that will be eliminating the chiller unit.

Pilot Self Evaluation

Holy Spirit Catholic Church completed self-assessments in the following areas of operation: energy/building operations, waste management, outdoor space, and transportation. Below are key findings from each assessment.

<u>Energy and Building Operations (see Appendix I):</u> Most of the property has been updated to LED lighting. Blinds are used in most of the classrooms to shade the building. They are working on adjusting their unoccupied temperatures to the recommended energy-efficient guidelines. Some of the school equipment has been upgraded to energy-efficient models. None of the appliances are unplugged after use, and there isn't signage reminding parishioners, staff, and students of good practices (such as turning lights off and unplugging appliances after use).

<u>Waste Management (see Appendix III):</u> At Holy Spirit Catholic Church, paper, plastic, and aluminum are recycled. Kitchen wastes (such as school lunches and special events) make up most of the waste that goes to the landfill or incinerator. It is estimated that 20% or more of the waste generated is compostable, but there are currently no composting efforts at the parish. Leftover food from events, however, gets donated to charity. Printers do have double-sided capability, but it is not promoted. There is no standardized signage for recycling bins on the property and no standardized signage reminding people of good practices. The parish rent recycling bins from Keep Indianapolis Beautiful every summer for their festival; recycling efforts for that event are led by volunteers.

Outdoor Space (see Appendix IV): The parish owns 10 acres, and about 40% of that is green space. There are garden areas with bushes, trees, and flowers. Grass is typically mowed weekly, and the clippings are mulched in the grounds Leaves are mulched in the grass when possible, but are otherwise bagged and put in trash containers. The lawn is treated twice a year with crab grass preventer and weed control. No pesticides or fertilizers are used. Runoff runs to the storm drains. The athletic fields are grass, but neither the fields nor the lawn is watered. There is a vegetable garden on the property. Approximately 15 yards of mulch is purchased once a year from Tiffany Lawn and Garden Supply.

<u>Transportation (see Appendix V):</u> Of the 2,000 families that attend Holy Spirit Catholic Church, it is estimated that 99.9% of them drive to Mass and other church activities. While there are public bus stations near the parish, this system is rarely used. Around 80% of the students get picked up and dropped off at school by their parents, and the remaining 20% ride Warren school buses. There is also one bike rack on the property. Parents can wait up to 90 minutes to pick up their students after school. The pastor has his own vehicle; it is estimated that he drives around 6,000 miles per year. There are no other parish-owned vehicles.

Energy Audit Description

Indianapolis Power and Light offers several free programs for their customers. The program utilized for this pilot program was the Small Business Direct Install Program. With this program, an energy assessment was scheduled. Installers made a site visit and conducted a free assessment to check the status of lighting in the building and check for ballast compatibility. During the assessment, they also installed complimentary LED products to ensure that savings started immediately. After the assessment, the participating location was given a rebate card so that future purchases would come with a discount. In addition to this initial visit, the Direct Install Program also offers installation of occupancy sensors through Godby. These appointments are

made around a month following the energy assessment, and installation of those sensors comes at no cost to the customer.

In the energy assessment at Holy Spirit Catholic Church (see Appendix II), 76 LED T8 replacement lamps were installed in two classrooms and in the concession area near the gym. One pre-rinse spray valve and three faucet aerators were installed in their kitchen area and staff lounge. For the future, IPL recommended that the parish install occupancy sensors to further save energy in their buildings.

Proposed 12-Month Sustainability Program

Below is the action plan which was created in conjunction with stakeholders in Holy Spirit Catholic Church. An initial meeting was held to discuss goals and priorities in each area of assessment. In attendance for that discussion were members of the Creation Care team at the parish. The discussion notes were later reviewed by the Director of Finance and Facilities, as well as the Pastor.

In the energy category, a key focus is reducing energy use from appliances. As of the writing of this action plan, their building campaign is taking place; this means that they have the opportunity to push for sustainable changes. They want to focus on purchasing energy-efficient appliances and investigate the possibility of solar energy. They would also like to use smart power strips in office spaces.

In the waste management category, stakeholders want to eliminate the use of Styrofoam and other disposable utensils, plates, etc. for parish-wide events. They would also like to start composting from school lunches. Lastly, they hope to host an e-waste drive for the parish and surrounding area.

In the outdoor space category, composting is the biggest focus. They have a vegetable garden on the property, so composting bins would likely be place near that. They are interested in using vermiculture to engage the students. They would also like to plant native landscaping on the property.

In the transportation category, stakeholders would like to focus on making their parish more "bike-friendly". They want to invest in more bike racks for the property and host bike safety workshops to break through some of the barriers associated with riding bikes.

In the education category, stakeholders would like to increase awareness of sustainability. They want to host Laudato Si' discussion groups which will explain both the science behind climate change and the Catholic Social Teaching on creation care. The Creation Care team wants to connect with the students in the school more to collaborate on projects and integrate sustainability into education at the parish.

Below is the complete 12-month Sustainability Program for Holy Spirit Catholic Church:

I. Energy

Project	Cost	Timeline	Leaders	Ranking
Occupancy				
sensor	\$*			Good
installment				
Investigate solar	\$\$\$			Best
energy options	ΨΨΨ			DCSt
Create				
standardized				
signage	\$			Good
reminding people				
of good practices				
Buy smart power	\$\$			Better
strips	ΨΨ			Detter
Invest in IPL				
Green Power	\$			Better
Option				
Maintain				
Portfolio	\$			Good
Manager	φ			Good
account				

^{*}This installation is free through Godby as part of the IPL Small Business Direct Install Program

Occupancy Sensors

This ensures that lights are only turned on when someone is occupying the space; eliminates the need for someone to be responsible for turning off the lights

Solar Energy Options

Investing in solar energy directly reduces the amount of carbon emissions being placed in the atmosphere by sourcing energy from a renewable source.

Standardized Signage

This will give people friendly reminders about good practices such as turning lights off when not in use and unplugging appliances when not in use. It successfully reinforces good behavior and reduces energy use from a behavior standpoint.

Smart Power Strips

These reduce energy use by taking away "vampire energy" that often stems from appliances being plugged in even when not in use.

IPL Green Power Option

This allows the parish to specify that part of their electricity be generated by a renewable source. Currently it costs \$0.0025 per kWh (in addition to standard IPL rates), and the source is Midwestern wind farms.

Portfolio Manager

This is a free program through EPA's Energy Star. It allows the parish to track their energy savings and compare themselves to other parishes with similar size/functions. It will allow them to track their progress in energy-reducing efforts.

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II. **Water Use**

Project	Cost	Timeline	Leaders	Ranking
Save water in	\$			Good
rain barrels	Ψ			Good
Use "green"				
cleaning	\$			Better
products				
Install low-flow				
faucet aerators	\$\$			Best
and	ΨΨ			Dest
showerheads				
Install faucets	\$\$			Best
with sensors	φΦ			Dest

Rain Barrel

This allows rainwater to be collected and used, rather than using city water or water from a well.

"Green" Cleaning Products
Many modern cleaning products contain chemicals like phosphorus, which can harm water quality. Green cleaning products do not contain these chemicals.

Low-Flow Aerators/Showerheads

This reduces the amount of water that is used when a sink or shower is being used.

Faucets with Sensors

These faucets detect motion so that water is only used when needed.

III. **Waste Management**

Project	Cost	Timeline	Leaders	Ranking
Eliminate use of Styrofoam products	\$\$			Better
Eliminate use of disposable utensils	\$\$			Best
Use reusable dishes in the kitchen	\$\$\$			Best
Create standardized bin signage	\$			Good
Start recycling program for batteries and e- waste	\$			Good
Host a technology	\$			Good

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waste drive		
Start working with kitchen to compost	\$	Better
Start vermiculture composting	\$\$\$	Best
Buy materials made from recycled content	\$	Better

Eliminate Styrofoam

Styrofoam cannot be recycled, so eliminating its use reduces the amount of waste heading directly into a landfill or to be burned in the city incinerator. This is also a problem because these products include toxins that are released when burned.

Eliminate Disposable Utensils and Dishes

This involves replacing disposable, single-use plastic utensils and dishes with reusable dishes that can be washed. It reduces the amount of waste produced by the church.

Reusable Dishes

Buying reusable dishes that can be used for mercy meals and other events reduces the amount of waste generated by the parish.

Standardized Signage

This gives visual reminders of what should be recycled, which will drive behavior towards good recycling habits.

E-Waste Recycling

This involves creating dedicated recycling for e-waste, such as toner cartridges and batteries. E-waste heavily contributes to contamination of soil and water resources. Creating a recycling program for this type of waste ensures that it is handled properly and diverted from the landfill.

Technology Waste Drive

This will be a community-wide event which gives the parish and the community a chance to drop off their technology waste. If not recycled, this waste would otherwise likely end up in a landfill to contaminate the soil and water.

Collect Compost

This involves collecting organic waste such as peels, grass, and leaves. Compost provides essential nutrients for plant growth and saves food waste and other organic waste from being directed to a landfill.

Vermiculture

This is a low-maintenance method of composting that involves worms. Composting produces natural fertilizer and reduces the amount of waste going into a landfill. It's also a great way to engage students and teach them about organic farming practices.

Buy Products Made from Recycled Content

Buying these type of products reduces waste and pollution by eliminating the need for more raw materials to be sourced.

IV. Outdoor Space

Project	Cost	Timeline	Leaders	Ranking
Plant native landscaping	\$\$			Better
Buy a rain barrel to harvest rainwater	\$			Good
Investigate options for rain garden	\$\$\$			Best
Plant a pollinator garden	\$\$			Best
Plant more trees	\$\$\$			Best

Native Landscaping

Native plants are adapted to the conditions of Indiana, so they require less water and less maintenance. They also provide a habitat for wildlife.

Rain Barrel

This allows rainwater to be collected and used, rather than using city water or water from a well.

Rain Garden

Rain gardens are a good way to divert water from draining into storm sewers. It also improves water quality.

Pollinator Garden

This provides a habitat and food for pollinators, which are vital to the cultivation of flowers, plants, and crops.

Plant Trees

Planting trees reduces the amount of stormwater runoff, provides natural cooling for nearby buildings, and removes carbon dioxide from the atmosphere.

V. Transportation

Project	Cost	Timeline	Leaders	Ranking
Start a "no idling" policy	\$			Better
Invest in more bike racks	\$\$			Better
Host workshops in bike safety	\$\$			Good
Activities involving students riding bikes	\$\$\$			Better
Encourage	\$			Best

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carpooling			
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"No Idling" Policy

This involves parents shutting off their car while waiting in line to pick up their students from school. It cuts down on vehicle-related emissions.

Bike Racks

This would provide more access for students and parishioners to park their bikes, and would encourage them to ride their bike to school or church.

Bike Safety Workshops

This provides the opportunity for students to learn about proper bike safety and would encourage them to ride bikes more.

Bike Activities

This could be anything from having a group-ride to taking a field trip where students ride bikes. It would encourage them to keep doing so as part of their daily life.

Encourage Carpooling

This reduces the amount of vehicles being driven every day, which in turn reduces the amount of vehicle-associated emissions.

VI. Purchasing

Project	Cost	Timeline	Leaders	Ranking
Take inventory of all products purchased within the parish	\$			Good
Create a green purchasing policy and implement it	\$\$			Best
Buy local goods/services	\$			Best

Inventory

This involves taking an inventory of all goods and services that the parish purchases, as well as the source of those goods and services. This will allow the parish to see what they could potentially switch.

Green Purchasing Policy

A green purchasing policy states that products purchased will be less damaging to human health and the environment than competitors' products.

Buy Local

This means resourcing goods and services to buy from local sources. It will cut down on vehicle-associated emissions and also help support the local economy.

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VII. Education

Project	Cost	Timeline	Leaders	Ranking
Start Laudato Si' discussions	\$			Best
Host recycling workshops for parishioners, students, staff	\$			Better
Monarch butterflies in the classroom	\$\$			Good
Have students conduct a food waste audit to teach about food waste	\$\$			Better
Calculate carbon footprint before and after program	\$			Best

Laudato Si' Discussions

This will provide an opportunity for parishioners to understand the importance of creation care, and will help with buy-in for the program.

Recycling Workshops

This will educate parishioners on issues such as what can/can't be recycled, where to take recycling, etc. It will increase recycling and decrease amount of waste being dumped into a landfill.

Monarch Butterflies

This is a good opportunity to teach students about not only the life cycle of butterflies, but also about the importance of pollinators for our ecosystems.

Food Waste Audit

This is a good opportunity to raise awareness for the issue of food waste and decrease the amount of food being dumped into a landfill. It is also a way to engage students.

Carbon Footprint

This involves the parish looking at all their emission-generating activities and calculating a "footprint" for their operations. This is another way for them to get a baseline so that they can track their progress and compare their footprint at the beginning and end of the program.

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Conclusions

Overall, Holy Spirit is currently at a moderate status. They have completed LED updates in most of their buildings. They have taken the initiative to start recycling at their annual summer festival. They have a vegetable garden which is maintained using organic gardening practices. The rest of the landscaping is also maintained using organic practices. They have a functioning Creation Care team that is eager to increase sustainability efforts and involve the school in those efforts as well. With their upcoming building campaign, Holy Spirit Catholic Church has the opportunity to make changes in their building such as investing in energy-efficient appliances and switching to reusable dishes to eliminate use of disposable goods.

Key elements of their action plan include investigating the possibility of solar energy, vermiculture, and native landscaping. The Creation Care team has taken an interest in looking at options for solar energy. Vermiculture is a good way to connect the school kids with the process of composting and organic gardening, while also reducing the amount of organic waste that ends up in the landfill or incinerator. The property has a lot of green space, so there is plenty of room to plant a rain garden or pollinator garden with native landscaping. Educating staff at the beginning of the school year will be crucial to increasing buy-in from the school. Education parishioners and actively partaking in the Season of Creation activities will help engage the parish at large.

Attachments:

Appendix I Energy Assessment

Appendix II IPL Report

Appendix III Waste Management Assessment

Appendix IV Outdoor Space Assessment Appendix V Transportation Assessment

Appendix I

Energy Assessment

Date: 05/30/19 **Lighting**

Are lights turned off when daylight is bright enough?	No, lights usually stay on
Has there been an effort to use energy-	Mostly switched to LED in parish center and
efficient light bulbs when incandescent bulbs burn out?	school - Some not completed in parish center
Are lights/lamps/fixtures clean?	Yes
Are blinds/curtains used to shade the building(s)? Are they closed at night?	Yes, most classrooms
Are external lights kept on in the daytime?	No
Are the lights turned off at night?	Most are off, but some are kept on in the school
Are gym lights turned off when not in use?	Yes (motion sensor)
How do you adjust classroom/hallway/kitchen	
spaces for breaks/holidays?	
Is there signage reminding staff to turn off	No
lights when not in use?	

Additional Comments: most of the bathrooms have motion sensors

Heating/Cooling

3-1-1-3	
Do off-hour activities extend operating house	
for energy-using systems?	
Is natural cooling (outside air) utilized?	No (discouraged from doing so)
Are there any guidelines on indoor	Working on:
temperature use? How do you handle the	Winter 68 (occupied) and 60 (unoccupied)
thermostats on a day-to-day basis? Where are	Summer 72 (occupied) and 80 (unoccupied)
they located? Are they vulnerable to occupant	
adjustment? What are the settings for heating	
and cooling season? Is it adjusted for	
unoccupied periods?	
What's the maintenance schedule for the	Twice a year (fall and spring)
HVAC systems?	Checked for filters at least quarterly
Is heating/AC used in unoccupied spaces?	Yes
Are radiators blocked by furniture or other	No
things which can restrict circulation?	
Are electric space heaters used anywhere?	Generally not allowed, but some people do
Is the exhaust system operation programmed?	
Is there any sort of maintenance routine for	
checking leaks/cracks in pipes?	
Are boilers maintained on a scheduled basis?	Yes; Two in PC (boiler room, lower level, heat
	basement and first floor); Three in school, one
	in church

Is there insulation on the roof space?	Yes
Are there any cracked windows?	No
Is there evidence of issues with double glazing	No
in windows (moisture between panes)?	
Do the windows/doors stay closed when	Yes
heat/AC is on?	
Could the building reduce heat by closing	Yes
blinds or using reflective film in windows?	
Is AC run at the same time as heating?	No
Does the chiller operate during cold weather to	Sometimes
provide AC?	
Do multiple AC compressors start	No
simultaneously?	
Do multiple boilers/heaters fire	No
simultaneously?	

Water

Are there evident water leaks/drips?	No
Are water temperatures reduced during unoccupied periods?	
What is the hot water temperature set at?	
Are water fountains on a timer?	
Are there devices in place to conserve heated water?	

Equipment

Is equipment kept on "energy saving" mode during the day?	Yes (main, central ones)
Can computers be switched off during the day?	No
Are the computer, fax machines, photocopiers, etc turned off at night?	Copiers go off automatically; computers stay on
Can a 7-day timer be put on some of the equipment (water coolers, vending machines, photocopiers)?	Yes, not used
Do vending machines remain energized during unoccupied periods?	Coke machine in school, not programmed
Are fridges placed next to heat sources?	No
Is the fridge thermostat working properly and set to the right temp?	8 total, set properly; bring in more refrigerators for summer festival
Are icemakers turned off?	Not many have working icemakers
Are microwaves, coffee machines, etc. unplugged after use?	Never
Are any of the appliances upgraded to energy- efficient models?	School equipment; some fridges may need replaced
Is there signage informing staff of these energy-saving strategies?	No

Additional Comments: iPad carts (at least 100), around 50 computers in school

Appendix II

IPL Report

Holy Spirit Church 7243 E 10TH ST INDIANAPOLIS, IN, 46219

IPL - SMALL BUSINESS DIRECT INSTALL



Holy Spirit Church 7243 E 10TH ST INDIANAPOLIS, IN, 46219

ENERGY ASSESSMENT REPORT FOR YOUR BUSINESS

Holy Spirit Church

PREPARED FOR

Alicia Nygra Holy Spirit Church 7243 E 10TH ST INDIANAPOLIS, IN, 46219 PREPARED BY

Charles Byres

IPL Small Business Direct Install Program

888.982.7071

Congratulations! By requesting this Energy Assessment, you've taken an important step towards improving your building's energy efficiency and managing your energy use. Effective energy management can result in lower electricity consumption, reduced operating costs, and increased reliability of building systems.

Holy Spirit Church 7243 E 10TH ST INDIANAPOLIS, IN, 46219

DIRECT INSTALL PROJECT SAVINGS SUMMARY

During your assessment, energy efficient products were installed to help you start saving energy today. The table below summarizes your efficiency project including efficient equipment, estimated energy savings, and energy cost savings.

Equipment Installed	Quantity	Installed Product Value (\$)	Estimated Energy Savings (kWh)*
Pre-Rinse Spray Valves	1	\$75	7629
Faucet Aerators	3	\$24	424
LED T8 Replacement Lamps	76	\$1140	5998

These savings are just the start of your potential energy management opportunities.

NEXT STEPS

In the following report, you will find a summary of additional energy saving recommended for your business. For each recommendation, we provide estimates for potential energy savings, energy cost savings, and incentives available through the IPL Small Business Direct Install Program.

Moving forward with these recommendations can save additional energy and improve your business's bottom line. With project incentives and program support, starting your next energy saving project is easy.

Ready to start saving? Work with your contractor to find the project mix that works best for you and find out how the IPL Business Energy Incentives Program can help.

Please visit IPLpower.com/business_energy_incentives/ or contact us at 888.982.7071 with any questions.

Holy Spirit Church 7243 E 10TH ST INDIANAPOLIS, IN, 46219

IPL - SMALL BUSINESS DIRECT INSTALL

Energy Efficiency Opportunity Assessment Report

Based on an analysis of your building's existing equipment we recommend completing the following energy efficiency projects. For each recommendation, we've estimated the cost after incentives, energy savings, and simple payback after program incentives. These estimates will help you plan for and complete your next efficiency project.

RECOMMENDED ENERGY EFFICIENCY PROJECTS

Recommended Equipment	Efficient Equipment Type	Quantity	Estimated Cost After Incentives (\$)	Estimated Energy Savings (kWh)	Simple Payback After Incentives (Years)
LED Lighting Controls	Lighting	10.00	717	888	8.1

Lighting

LEDs are a highly efficient lighting technology that can significantly reduce your energy costs. LEDs are long lasting, which can help reduce maintenance costs compared to traditional lighting systems with lamps and ballasts. Additionally, LEDs are typically compatible with lighting controls, such as Occupancy Sensors and Daylighting Controls. Adding lighting controls to your LED project will help further reduce energy use and operating costs.

To qualify for rebates, LED screw-in lamps need to be ENERGY STAR listed, and LED tubes and fixtures need to be listed on the DesignLights Consortium's Qualified Product List. Please confirm the current program guidelines for complete eligibility requirements before purchasing your LEDs.

PROGRAM RESOURCES AND DISCLAIMER

Contact Information:

IPL - SMALL BUSINESS DIRECT INSTALL

Phone: 888.982.7071 Email: info@IPLrebates.com

Please visit <u>IPLpower.com/business_energy_incentives/</u> for current rebate offerings or additional information on project requirements and terms of program participation.

The report recommendations provided are based on responses to a survey on building systems, equipment, and occupancy completed by a site representative. Estimated energy savings, energy costs savings, and recommended project costs are based on average program values. Project costs, savings, rebates, and paybacks are not guaranteed. Program offerings, availability, and rebate levels are subject to change at any time.

IPL reserves the right to change elements of the program without notice.

Appendix III

Waste Management Assessment

Date: 06/04/19 **General Questions**

General Questions	
Check major waste generating activities.	Office supplies
	*_ Kitchen wastes (school lunches,
Make a star next to the ones that generate the	Sunday mass, special events)
most waste.	Landscaping (yard clippings)
	Shipping containers (cardboard)
	Others (please explain):
How many times does waste get collected each week?	5 days per week
How much waste do you generate each week	5 generally full 8 cu. Yards
that is placed in a dumpster? (How many	
dumpsters are full?)	
Have you mapped where bins and dumpsters	No
are located?	
What is the current waste handling cost?	\$800-\$1000 for recycling and waste
How is waste handled that's generated by the	City trash pick up
rectory?	
What do employees typically do for lunch?	Bring their own or go pick up fast food
Are there vending/soda machines anywhere?	1 in the school
How many?	
Is e-mail encouraged (rather than printing out	No
paper)?	
Do printers have double-sided capabilities? If	Yes, but no
so, do you encourage double-sided copies?	
Do you buy paper/office supplies made from	No
recycled content?	
What's the process for determining the need	Employees notify secretary
for office supplies?	
How much of the waste generated in a week	Possibly 20 percent and none is composted
would you estimate is compostable?	currently
How much is actually composted?	
Does leftover food get donated to charities?	Yes
Do you have composting capability on-site?	Yes
Do you reuse or repurpose anything? Explain.	Boxes are reused if possible
Are there any unused items (furniture,	No
equipment, etc) being stored in the building	
that could be reused?	
How much recycled material do you estimate	1 dumpster, and yes it is picked up weekly,
is generated each week?	from a recycled bin
How much is actually recycled?	
Is there a recycling program in place? If yes,	See above
how often does recycling get collected?	

How many recycling bins are there? Where are they located?	1 recyling bin in between school buildinsg, there is also a paper recycling in main parking lot
Please provide details of any waste reduction/recycling efforts (including special events, festivals, sporting events, etc).	At festival we rent 24 recyling bins from KIB and recycle whatever we can
What percentage of your parishioners (or students, faculty, staff) do you estimate recycles their waste at home?	20 percent
Are there dedicated recycling bins for batteries and toner cartridges?	No
Is there standardized bin signage for recycling/trash bins?	No, we need help with that, it is confusing
Are there posters/other materials reminding users of good recycling practices?	No
What materials would you prioritize if a recycling program was in place?	Composting from school lunches

Please list any major festivals or other events that your parish/school hosts. For each of these events, please describe: major activities at the event; what is purchased or consumed at the event; and how waste is handled at the event, including any recycling efforts.

Festival, lots of paper products and food products. We have separate waste and recycle bins around property during event and trash and recycling is pulled constantly by the trash and recycling volunteers. We do not compost.

Waste Audit

Recyclable items	is this in your trash?	what Percentage?
Paper (e.g., office paper, mail, magazines, shredded paper, file folders, packing paper)	☐ Yes ⊠ No	
Paper boxes (e.g. cereal, cookie and cracker boxes, supplies and electronics boxes)	☐ Yes ☒ No	
Cardboard	☐ Yes ☒ No	
Plastic bottles, jugs, cups, food containers (clean), packaging	☐ Yes ☒ No	
Metal cans and pans (rinsed) from food and beverages	☐ Yes ☐ No	
Cartons (milk and broth cartons, juice boxes)	⊠ Yes □ No	
Glass bottles and jars from food and beverages	☐ Yes ☒ No	
Organic material (food scraps, napkins)	⊠ Yes □ No	

Appendix IV

Outdoor Space Assessment

Date: 06/17/29

Date: 06/17/29	
How many acres does the parish own?	10
Estimate the percentage of that land that is	40
non-hard surface (no parking lots or buildings).	
Describe the landscaping on the property.	grass in fields and front yard. Garden areas
	around campus with bushes, trees,flowers
How many trees are planted on the property?	15, pines, maples and birch
What types of trees are they?	
Are there flowers planted on the property?	yes
Are there any ponds, lakes, or natural springs on the property?	no
How often is grass typically mowed?	weekly
How are grass clippings handled?	mulched in grounds
How is other outdoor waste (leaves, sticks, etc) handled?	Leaves are mulched in grass when possible, sticks and other leaves put in trash container
Is the lawn treated? How often and with what	lawn is treated twice a year with crab grass
kind of materials?	preventer and weed control
Are pesticides/fertilizers used anywhere?	Chemicals are discouraged since we are a
If yes, please explain the kind of chemical	school.
used and how it is used on the property.	
Are there any native plants on the property?	not sure about this
If so, describe the type of plant and where they	
are located.	
Is the lawn watered? If so, how often?	no
Are the athletic fields watered? How often?	no
What is the source of water used for irrigation?	n/a
Is rainwater harvested and used for irrigation?	no
How is roof water directed?	through drainage pipes then to street drains
How is runoff handled from the property?	drainage to stormsewers
(drainage to stormsewers, retention/detention	
ponds, raingardens, etc)	
Are there sump pumps from the basements to	yes
discharge water, keeping the basement dry?	
What time of day is the property watered?	N/a
Is there a sprinkler system in place? If so, is	no
there a timer of or quick shut-off valves on the	
system?	
Is there a vegetable garden on the property?	yes
Is mulch used on the property? How much is	yes, 15 yards per year, Tiffany's
purchased and how often is it purchased?	
What is the source of the mulch?	
Are the athletic fields grass or turf?	grass

Appendix V

Transportation Assessment

Date: 06/19/19 **Parish**

How many families attend your parish?	2000
What percentage of parishioners do you	99.9
estimate drive to Mass and other church	
events?	
How many do you estimate carpool?	1%
What percentage of parishioners do you	.01%
estimate walk/bike to Mass and other church	
events?	
Are there public bus stations near your parish?	yes
How many?	
Are there bike racks around the church	yes
building? How many?	
What's the farthest distance anyone has to	30 miles
travel to church?	
Is there a vehicle for the parish priest?	no
Are any of the church vehicles hybrid/electric?	no
How many miles do priest/church vehicles	115 per week, 6000 per year, but in their own
drive in a week? In a year?	vehicles. We reimburse mileage

Additional Comments:

School

3011001	
How many employees and students drive to	100% 408 students, 72 employees avg during
work/school on a daily basis?	school year
What's the longest distance a student/family drives to school?	30 miles
What percentage of students get picked-up/dropped-off at school by their parents?	80%
What time is pick-up for students? How long do parents typically wait in line to pick up their kids?	2:45 pm, parents wait up to 90 minutes.
What percentage of students walk/ride their bike to school?	about 2 percent
Do you have school buses? How many? What percentage of students are eligible for bus services?	20 % ride Warren School buses.
What percentage of students take the bus to school?	20%
How many days in a week are the school buses used? How many days in a year?	We do not own them
Are there bike racks on your property? How many?	One bike rack for about 6 bikes
How many students drive to school?	none

Do students carpool? Is there an incentive to	n/a
carpool?	
Do students pay for parking passes?	n/a
Are there any other vehicles owned by the	no
parish/school? Please list them and explain	
what their use(s) is/are.	

Additional Comments: We do let a parishioner park a truck 9 months a year on our campus. We use it sometimes and we pay insurance.

Archdiocese of Indianapolis Creation Care Commission

Living Laudato Si' Sustainability Pilot Program

Scecina Memorial High School

5000 Nowland Avenue, Indianapolis, Indiana, 46201

Final Report

Introduction

The Creation Care Commission is a ministry of the Archdiocese of Indianapolis that is housed under Pastoral Ministries. The official mission of the Creation Care Commission is "to encourage and foster the care for God's creation as a way of life and a core principle of our Catholic faith and to minimize the Archdiocese' impact on the environment". Its vision is this: that all parishioners will live environmentally-conscious lifestyles based on the values in Pope Francis' encyclical *Laudato Si*' and, consequently, understand that creation care is a moral imperative. They are guided by the goals that everything the Archdiocese does is completed in an ethical and environmentally conscious manner, and that everything is done based on Catholic social teaching.

The inaugural sustainability program is comprised of a cohort of four parishes and one high school that are all in the same relative geographic area. These parishes and schools signed a covenant of commitment promising to cooperate with the Creation Care Commission over the ten-week pilot program and ensuing twelve-month implementation phase. Upon success of this pilot program, the Creation Care Commission will make recommendations for moving forward in expanding the sustainability program to other parishes and schools across the Archdiocese.

Facility Description

Scecina Memorial High School is located on 5000 Nowland Avenue on the east side of Indianapolis. Their student enrollment is currently around 400 students, and the school has an additional 70 employees. There are three buildings on Scecina's property: the main school building; St. Francis Hall, which houses several offices; and a separate building that houses the weight room and football locker room.

Scecina's HVAC system has multiple units. Two rooftop units, manufactured by AAON, provide chilled air and heat to 98% of the building. Five additional rooftop units, manufactured by Sanyo, provide additional chilled air and heat to the Presidential Suite and 8 classrooms. Another two rooftop units, manufactured by LG, provide additional chilled air and heat to the library, Collaboration Room, and Guidance Office. One last rooftop unit, manufactured by Mitsubishi, provides chilled air and heat to the Band Room. There are also multiple window units throughout the facility to provide chilled air.

Pilot Self Evaluation

Scecina Memorial High School completed self-assessments in the following areas of operation: energy/building operations, waste management, outdoor space, and transportation. Below are key findings from each assessment.

<u>Energy and Building Operations (See Appendix I):</u> Most of the lighting in the school has been updated to LED. Additionally, there are motion sensors in all hallways, classrooms, office spaces, and the gym. The biggest energy consumers in the school are two rooftop HVAC units which run all day, every day. There are also two icemakers that are never turned off. All equipment such as printers and photocopiers have "energy saving" modes and are kept on this setting. Appliances remain plugged in when not in use. There is no signage reminding staff and students of good practices.

<u>Waste Management (See Appendix III):</u> Office supplies, shipping containers, and kitchen wastes generate the most waste at the school; however, kitchen waste makes up the majority of waste that is thrown in the trash. It is estimated that around 25% of waste generated is organic material, but none is composted. It is further estimated that of the 300 lbs of recyclable waste generated each week, around 200 lbs of that is recycled. There are six large bins for recycling placed around the school. The school recycles paper, plastic, and aluminum.

<u>Outdoor Space (See Appendix IV):</u> The school owns 11 acres, and it is estimated that 50% of that space is green space. There are many trees, shrubs, flowers, and plants on the property. Grass is mowed weekly and the grass is mulched into the ground. The lawn is typically not watered, with the exception of the athletic fields in summer months. There are no native plants on the property.

<u>Transportation (See Appendix V):</u> A large majority of staff and students drive to school, since Scecina does not offer transportation. The rest of the students are picked up and dropped off by their parents, and a few ride their bikes or walk to school. Pick-up for students is at 3:05 pm, and parents will wait for up to 45 minutes to pick up their students. There is one bike rack on the property. They do have five school buses that are used for athletic events and other school events. The school also has a vehicle that is used for driver's education purposes.

Energy Audit Description

Indianapolis Power and Light offers several free programs for their customers. The program utilized for this pilot program was the Small Business Direct Install Program. With this program, an energy assessment was scheduled. Two installers came to the site and conducted a free assessment to check the status of lighting in the building and check for ballast compatibility. During the assessment, they also installed complimentary LED products to ensure that savings started immediately. After the assessment, the participating location was given a rebate card so that future purchases would come with a discount. In addition to this initial visit, the Direct Install program also offers installation of occupancy sensors through Godby. These appointments are made around a month following the energy assessment, and installation of those sensors comes at no cost to the customer.

[Scecina Memorial High School IPL assessment to be completed at a later date]

Proposed 12-Month Sustainability Program

Below is the action plan which was created in conjunction with stakeholders at Scecina Memorial High School. An initial meeting was held to discuss goals and priorities in each area of assessment. In attendance for that discussion were the President, the Assistant to the President, the Interim Principal, and the Facilities Manager.

In the energy category, stakeholders would like to increase energy efficiency by investing in power strips, investing in a programmable thermostat system, and investigating options for solar power. They would also like to create standardized signage reminding staff and students of good practices.

In the waste management category, the school would like to increase overall recycling efforts by expanding their recycling programs and making the process more streamlined. They would like to host a community-wide technology drive where community members can drop off their old electronics to be recycled. They would also like to start composting kitchen waste.

In the outdoor space category, stakeholders would like to make their campus greener. They would like to plant a vegetable garden and compost. They would also like to look into installing a rooftop garden or buying beehives. Lastly, they want to switch their pesticides and fertilizers to organic products.

In the transportation category, the school would like to decrease vehicle use as much as possible. They hope to do this by creating carpooling incentives for students, installing more bike racks on the property, and encouraging group rides with staff and students.

In the education category, the biggest focus for the school is expanding the "Red and Gold Going Green" club. They will do this by increasing the number of students in the club, creating more projects for the club to complete, and increasing outreach of the club to nearby schools.

Below is the complete 12-month Sustainability Program for Scecina Memorial High School:

I. Energy

Project	Cost	Timeline	Leaders	Ranking (Good, Better, Best)
Install occupancy sensors	\$*			Good
Make inventory of "energy users" in the building	\$			Good
Buy smart power strips	\$\$			Better
Invest in a programmable thermostat system	\$\$\$			Best
Investigate solutions for HVAC system	\$\$\$			Best
Create signage reminding staff and students of good practices	\$			Good
Invest in solar kits for lighting up outside signs	\$\$			Better

Investigate options for rooftop solar	\$\$\$		Best
IPL Green Power Option	\$		Better
Maintain Portfolio Manager account	\$		Good

^{*}This installation is free through Godby as part of the IPL Small Business Direct Install Program

Occupancy Sensor Installment

This ensures that lights are only turned on when someone is occupying the space; eliminates need for someone to be responsible for turning off the lights

Energy Inventory

This will help the school keep track of everything that is using energy within the school, which will in turn allow them to monitor their energy usage more comprehensively.

Smart Power Strips

These reduce energy use by taking away "vampire energy" that often stems from appliances being plugged in even when not in use.

Programmable Thermostat

This system allows the administrator of the system to control temperatures in every area of the school. It would help save energy by ensuring that unoccupied spaces aren't being unnecessarily heated or cooled.

HVAC Solutions

This will fix the issue that the school has with their rooftop units running 24/7 and using energy all day.

Standardized Signage

This will give people friendly reminders about good practices such as turning lights off when not in use and unplugging appliances when not in use. It successfully reinforces good behavior and reduces energy use from a behavior standpoint.

Solar Kits

These would provide solar power to light up school signs that are outside. It would introduce renewable energy to the school.

Investigate Solar Energy

Investing in solar energy directly reduces the amount of carbon emissions being placed in the atmosphere by sourcing energy from a renewable source.

IPL Green Power Option

This allows the parish to specify that part of their electricity be generated by a renewable source. Currently it costs \$0.0025 per kWh (in addition to standard IPL rates), and the source is Midwestern wind farms.

Portfolio Manager

This is a free program through EPA's Energy Star. It allows the parish to track their energy savings and compare themselves to other parishes with similar size/functions. It will allow them to track their progress in energy-reducing efforts.

II. Water Use

Project	Cost	Timeline	Leaders	Ranking (Good, Better, Best)
Save water in rain barrels	\$			Good
Use "green" cleaning products	\$			Better
Install low-flow faucet aerators and showerheads	\$\$			Best
Install faucets with sensors	\$\$			Best

Rain Barrel

This allows rainwater to be collected and used, rather than using city water or water from a well.

"Green" Cleaning Products

Many modern cleaning products contain chemicals like phosphorus, which can harm water quality. Green cleaning products do not contain these chemicals.

Low-Flow Aerators/Showerheads

This reduces the amount of water that is used when a sink or shower is being used.

Faucets with Sensors

These faucets detect motion so that water is only used when needed.

III. Waste Management

Project	Cost	Timeline	Leaders	Ranking (Good, Better, Best)
Start a composting program for the kitchen	\$\$			Best
Standardize recycling and make it more widespread	\$			Better
Eliminate use of Styrofoam products at events	\$			Best

Start recycling program for batteries, toner cartridges, etc	\$	Better
Host a community-wide technology drive	\$	Good
Develop signage for recycling bins	\$	Good
Put ArchIndy Creation Care logo on recycling bins	\$	Good
Place small recycling bins in offices	\$	Better
Recycle bottle caps*	\$	Good
Conduct a food waste audit and reduce food waste in cafeteria	\$	Good

^{*} An alternate option is to find a creative way to repurpose them, such as making a mural out of them and donating that mural to a hospital or nursing home.

Composting

This involves collecting organic waste such as peels, grass, and leaves. Compost provides essential nutrients for plant growth and saves food waste and other organic waste from being directed to a landfill.

Standardize Recycling

This means making all the recycling bins and processes uniform. It will make recycling easier for staff, students, and visitors.

Eliminate Styrofoam

Styrofoam cannot be recycled, so eliminating its use reduces the amount of waste heading directly into a landfill or to be burned in the city incinerator. This is also a problem because these products include toxins that are released when burned.

Start E-Waste Recyling

This involves creating dedicated recycling for e-waste, such as toner cartridges and batteries. E-waste heavily contributes to contamination of soil and water resources. Creating a recycling program for this type of waste ensures that it is handled properly and diverted from the landfill.

Community-Wide Technology Drive

This will be a community-wide event which gives the parish and the community a chance to drop off their technology waste. If not recycled, this waste would otherwise likely end up in a landfill to contaminate the soil and water.

Standardized Signage

This gives visual reminders of what should be recycled, which will drive behavior towards good recycling habits.

Recycling Bins in Offices

This involves placing small recycling bins in every office. Offices tend to be places with large amounts of waste (especially paper), so this will increase recycling rates at the school.

Recycle Bottle Caps

The school has a lot of bottle caps that they have collected over the years. This involves finding someplace that will take those bottle caps to be recycled.

Food Waste Audit

This is a good opportunity to raise awareness for the issue of food waste and decrease the amount of food being dumped into a landfill. It is also a way to engage students.

IV. Outdoor Space

Project	Cost	Timeline	Leaders	Ranking (Good, Better, Best)
Plant native landscaping	\$\$			Better
Plant a pollinator garden	\$\$			Better
Investigate options for purchasing beehives	\$\$\$			Better
Plant a vegetable garden	\$\$			Best
Install a rooftop garden	\$\$\$			Best
Purchase organic fertilizer/pesticides	\$\$			Better
Start tradition of "class tree"	\$			Good

Native Landscaping

Native plants are adapted to the conditions of Indiana, so they require less water and less maintenance. They also provide a habitat for wildlife.

Pollinator Garden

This provides a habitat and food for pollinators, which are vital to the cultivation of flowers, plants, and crops.

Beehives

This involves buying physical beehives and taking care of them. Bees are pollinators, so it would also be beneficial for plant growth.

Vegetable Garden

This involves creating raised beds and planting vegetables that can then be used for school lunches or donated to food pantries. It's a good way to engage the students and teach them about organic farming/gardening practices.

Rooftop Garden

This involves creating a garden – whether that be vegetables or flowers – on the top of a roof. It also has added benefits such as providing natural cooling for the building. It's a good way to utilize space.

Organic Pesticides/Fertilizers

Organic pesticides/fertilizers have less chemicals and are healthier both for the environment and human health.

"Class Tree" Tradition

Planting trees reduces the amount of stormwater runoff, provides natural cooling for nearby buildings, and removes carbon dioxide from the atmosphere. Planting a class tree is a tradition that can engage the students as well and make it more personal to them.

V. Transportation

Project	Cost	Timeline	Leaders	Ranking (Good, Better, Best)
Create carpooling incentives for students	\$			Best
Encourage group rides	\$			Better
Install more bike racks on the property	\$\$			Good
Create a "no idling" policy	\$			Good

Carpooling Incentives

This involves incentives that would encourage students to carpool, such as reduced parking pass rates for carpooling vehicles.

Group Rides

This involves encouraging students to walk/ride their bikes to school together. It could be a onetime event or a regular occurrence. This would decrease the amount of vehicle-related emissions that come from the school.

Bike Racks

Purchasing more bike racks and placing them around the property gives students more access to parking for their bikes, which may encourage students to ride their bikes to school.

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"No Idling" Policy

This involves parents shutting off their car while waiting in line to pick up their students from school. It also involves students not sitting outside in their cars before school starts. It cuts down on vehicle-related emissions.

VI. Purchasing

Project	Cost	Timeline	Leaders	Ranking (Good, Better, Best)
Take inventory of all products purchased within the parish	\$			Good
Create a green purchasing policy and implement it	\$\$			Best
Buy local goods/services	\$			Best

<u>Inventory</u>

This involves taking an inventory of all goods and services that the parish purchases, as well as the source of those goods and services. This will allow the parish to see what they could potentially switch.

Green Purchasing Policy

A green purchasing policy states that products purchased will be less damaging to human health and the environment than competitors' products.

Buy Local

This means resourcing goods and services to buy from local sources. It will cut down on vehicle-associated emissions and also help support the local economy.

VII. Education

Project	Cost	Timeline	Leaders	Ranking (Good, Better, Best)
Develop educational materials and progress report sheet	\$\$			Good
Create options for sustainability- related service projects	\$			Better
Expand "Going Green" club	\$			Better
"Going Green" club outreach to schools	\$			Best

Host workshops about different topics	\$\$	Better
Educate staff and students at beginning of semester	\$	Good
Start a speaker series for students	\$\$	Good
Calculate carbon footprint before and after program	\$	Best

Educational Materials

This involves creating materials for staff and students to use as references. It also involves creating a progress sheet that's placed in a central location so that students and staff can track their progress with the action plan. It will help keep momentum going forward.

Sustainability-Related Service Projects

These are projects coordinated by the school that involve sustainability, whether that be park clean-ups or volunteering for a sustainability-related organization. It helps students achieve community service goals while also focusing on the importance of creation care.

Expand "Going Green" Club

This includes gaining student involvement in the club and creating more projects for the club to work on. It will help integrate sustainability into school operations by gaining student enthusiasm.

Outreach

The "Red and Gold Going Green" club will reach out to local schools and teach the students about creation care and the projects that they are working on, as well as give support to sustainability projects going on in those schools. It increases awareness for creation care and establishes community relationships.

Workshops

These are hands-on workshops about sustainability-related topics such as gardening, composting, recycling, etc. It helps the students and staff learn about these topics so that they are able to apply them.

Educate Staff

This involves educating staff at the beginning of the school year about the goals for the school, as well as the projects that the school wants to complete. It helps gain buy-in for the program.

Speaker Series

Similar to the workshops, these are sessions where professionals in the sustainability field talk to students about the importance of creation care and ways they can take action as students.

Carbon Footprint

This involves the parish looking at all their emission-generating activities and calculating a "footprint" for their operations. This is another way for them to get a baseline so that they can track their progress and compare their footprint at the beginning and end of the program.

Conclusions

Overall, Scecina Memorial High School is at a moderate status. They are already implementing several sustainable practices within their facilities. For example, they have completed LED updates on most of the building and installed motion sensors to further energy savings. With their paper-reducing initiative, they have cut paper usage and associated waste nearly in half in only a year. Their athletic buses have a "no idling" policy during competitions that are at another school, effectively reducing transportation-associated emissions.

Key elements in SMHS's action plan are community service/outreach and student engagement. Their "Red and Gold Going Green" club has the potential to involve the entire community in both service and education through sustainability-related service projects and outreach to local schools. They have the capability to take charge of some of the projects such as composting and planting a pollinator garden. Educating staff at the beginning of the school year and partaking in the Season of Creation activities will be helpful in gaining buy-in for the program. Scecina Memorial High School is dedicated to a mission of excellence in every aspect of education, and integrating sustainability into their operations is the next step of their mission

Attachments:

Appendix I Energy Assessment

Appendix II IPL Report

Appendix III Waste Management Assessment

Appendix IV Outdoor Space Assessment Appendix V Transportation Assessment

Appendix I

Energy Assessment

Date: 05/29/19 **Lighting**

Are lights turned off when daylight is bright enough?	Sometimes
Has there been an effort to use energy- efficient light bulbs when incandescent bulbs burn out?	Sensor lighting in gym, hallway, offices; LED bulbs everywhere (updated a few years ago); may be a few areas without LED
Are lights/lamps/fixtures clean?	Yes
Are blinds/curtains used to shade the building(s)? Are they closed at night?	Yes
Are external lights kept on in the daytime?	No
Are the lights turned off at night?	Yes, all on sensors
Are gym lights turned off when not in use?	Yes, on sensors
How do you adjust classroom/hallway/kitchen spaces for breaks/holidays?	None; parking lot lights
Is there signage reminding staff to turn off lights when not in use?	no

Heating/Cooling

neating/cooling	
Do off-hour activities extend operating house for energy-using systems?	
Is natural cooling (outside air) utilized?	Sometimes
Are there any guidelines on indoor temperature use? How do you handle the thermostats on a day-to-day basis? Where are they located? Are they vulnerable to occupant adjustment? What are the settings for heating and cooling season? Is it adjusted for unoccupied periods?	Thermostats need replaced; no programming AAON system is 75 all the time Not adjusted for unoccupied periods
What's the maintenance schedule for the HVAC systems?	Every three months; switching to monthly in July
Is heating/AC used in unoccupied spaces?	Yes
Are radiators blocked by furniture or other things which can restrict circulation?	No

Are electric space heaters used anywhere?	Yes (St. Francis Hall second floor, some offices in schools)
In the exhaust exetem eneration programmed?	No
Is the exhaust system operation programmed?	NO
Is there any sort of maintenance routine for	Yes
checking leaks/cracks in pipes?	
Are boilers maintained on a scheduled basis?	Boiler located in boiler room downstairs,
	checked once a month in winter
Is there insulation on the roof space?	
Are there any cracked windows?	Some
Is there evidence of issues with double glazing in windows (moisture between panes)?	Some
in windows (moisture between panes):	
Do the windows/doors stay closed when	For the most part (teacher discretion)
heat/AC is on?	
Could the building reduce heat by closing	Yes, blinds are in place
blinds or using reflective film in windows?	
Is AC run at the same time as heating?	No
Does the chiller operate during cold weather to provide AC?	Sometimes
provide AC?	
Do multiple AC compressors start	No
simultaneously?	
Do multiple boilers/heaters fire	No
simultaneously?	

Additional Comments:

AAON system are biggest energy consumers (rooftop units) 3 cooling systems in building (2 on roof for east/west side, external air intake, run 24/7, secondary cooling for offices/classrooms that are on thermostats)

St. Francis Hall does not have cooling

Water

Are there evident water leaks/drips?	No
Are water temperatures reduced during unoccupied periods?	Takes really long time to get hot
What is the hot water temperature set at?	140 (guess)
Are water fountains on a timer?	no
Are there devices in place to conserve heated water?	

Equipment

Is equipment kept on "energy saving" mode during the day?	Yes; all new printers bought last year
Can computers be switched off during the day?	Yes but most are not
Are the computer, fax machines, photocopiers, etc turned off at night?	Yes (no school-wide policy, but definitely done)
Can a 7-day timer be put on some of the equipment (water coolers, vending machines, photocopiers)?	Coke machine condenser is shut off at night; ice cream machine runs 24/7; Coke machine in St. Francis Hall
Do vending machines remain energized during unoccupied periods?	Yes
Are fridges placed next to heat sources?	No
Is the fridge thermostat working properly and set to the right temp?	Yes Household fridges, industrial in kitchen (temp turned up in summer)
Are icemakers turned off?	No (two icemakers run 24/)
Are microwaves, coffee machines, etc. unplugged after use?	No
Are any of the appliances upgraded to energy-efficient models?	Unsure (water machine potentially upgraded) Ice machine may need upgraded as well
Is there signage informing staff of these energy-saving strategies?	No

Additional Comments: One of the freezers is shut down in the summer

Appendix II

IPL Report

Appendix III

Waste Management Assessment

Date: 6/5/2019 **General Questions**

General Questions	
Check major waste generating activities.	X_ Office supplies
	* Kitchen wastes (school lunches,
Make a star next to the ones that generate the	Sunday mass, special events)
most waste.	Landscaping (yard clippings)
	X_Shipping containers (cardboard)
	Others (please explain):
How many times does waste get collected	5 times M-F
each week?	444 244 11 11 11
How much waste do you generate each week	½ to ¾ full each night
that is placed in a dumpster? (How many	
dumpsters are full?)	N ₁ -
Have you mapped where bins and dumpsters	No
are located?	(*400
What is the current waste handling cost?	\$420 monthly
How is waste handled that's generated by the	N/A
rectory?	
What do employees typically do for lunch?	Brown bag or eat out
Are there vending/soda machines anywhere?	Yes. 4 total machines.
How many?	
Is e-mail encouraged (rather than printing out	yes
paper)?	l vaa
Do printers have double-sided capabilities? If so, do you encourage double-sided copies?	yes
Do you buy paper/office supplies made from	Voc
recycled content?	yes
What's the process for determining the need	N/A
for office supplies?	
How much of the waste generated in a week	1/4. None is composted
would you estimate is compostable?	74. None is composited
How much is actually composted?	
Does leftover food get donated to charities?	No
Do you have composting capability on-site?	No
Do you reuse or repurpose anything? Explain.	No
Are there any unused items (furniture,	Yes
equipment, etc) being stored in the building	
that could be reused?	
How much recycled material do you estimate	300 lbs generated. 200 lbs recycled.

is generated each week?	
How much is actually recycled?	
Is there a recycling program in place? If yes,	Yes. 1 time weekly
how often does recycling get collected?	
How many recycling bins are there? Where	6 toters deployed throughout the school
are they located?	building
Please provide details of any waste	
reduction/recycling efforts (including special	
events, festivals, sporting events, etc).	
What percentage of your parishioners (or	10%
students, faculty, staff) do you estimate	
recycles their waste at home?	
Are there dedicated recycling bins for batteries	no
and toner cartridges?	
Is there standardized bin signage for	yes
recycling/trash bins?	
Are there posters/other materials reminding	no
users of good recycling practices?	
What materials would you prioritize if a	Compost materials, kitchen waste, paper
recycling program was in place?	

Waste Audit

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Recyclable items	Is this in your trash?	What Percentage?
Paper (e.g., office paper, mail, magazines, shredded paper, file folders, packing paper)	⊠ Yes □ No	50
Paper boxes (e.g. cereal, cookie and cracker boxes, supplies and electronics boxes)	□ Yes ⊠ No	
Cardboard	☐ Yes ⊠ No	
Plastic bottles, jugs, cups, food containers (clean), packaging	⊠ Yes □ No	40
Metal cans and pans (rinsed) from food and beverages	⊠ Yes □ No	15
Cartons (milk and broth cartons, juice boxes)	⊠ Yes □ No	100
Glass bottles and jars from food and beverages	⊠ Yes □ No	75
Organic material (food scraps, napkins)	⊠ Yes □ No	100

Additional Comments: Kitchen does not utilize any recycling programs at this time.

Appendix IV

Outdoor Space Assessment

Date: 6/13/2019

How many acres does the parish own?	11
Tiow many acres does the pansirown:	
Estimate the percentage of that land that is	50%
non-hard surface (no parking lots or buildings).	
Describe the landscaping on the property.	Mature trees, shrubs, flowers, various plants,
	mulch
How many trees are planted on the property?	22 trees consisting of maple, magnolia, pear,
What types of trees are they?	and crabapple
Are there flowers planted on the property?	Yes
Are there any ponds, lakes, or natural springs	No
on the property?	
How often is grass typically mowed?	Once weekly during spring and summer, PRN
How are grass clippings handled?	mulched
How is other outdoor waste (leaves, sticks,	Disposed of
etc) handled?	
Is the lawn treated? How often and with what	Yes, 5x's annually. Fertilizer and weed control
kind of materials?	
Are pesticides/fertilizers used anywhere?	Yes
If yes, please explain the kind of chemical	
used and how it is used on the property.	NA
Are there any native plants on the property?	No
If so, describe the type of plant and where they	
are located.	No
Is the lawn watered? If so, how often? Are the athletic fields watered? How often?	No Coopeignally during summer months
	Occasionally during summer months Local water source
What is the source of water used for irrigation? Is rainwater harvested and used for irrigation?	no
How is roof water directed?	To storm drains
How is runoff handled from the property?	To storm drains
(drainage to stormsewers, retention/detention	TO Storm drains
ponds, raingardens, etc)	
Are there sump pumps from the basements to	yes
discharge water, keeping the basement dry?	y 65
What time of day is the property watered?	NA
Is there a sprinkler system in place? If so, is	no
there a timer of or quick shut-off valves on the	
system?	
Is there a vegetable garden on the property?	no
Is mulch used on the property? How much is	22 cubic yards. Crushed and tinted pallets
purchased and how often is it purchased?	
What is the source of the mulch?	
Are the athletic fields grass or turf?	grass

Appendix V

Transportation Assessment

Date: 6/24/2019

School

301001	
How many employees and students drive to work/school on a daily basis?	66 employees, 125 students.
What's the longest distance a student/family drives to school?	35 minutes/25 miles.
What percentage of students get picked-up/dropped-off at school by their parents?	75 percent
What time is pick-up for students? How long do parents typically wait in line to pick up their kids?	3:05pm. Typical wait is 5-15 minutes.
What percentage of students walk/ride their bike to school?	2 percent
Do you have school buses? How many? What percentage of students are eligible for bus services?	Yes. 5 buses. Scecina does not offer transportation.
What percentage of students take the bus to school?	Zero. Scecina does not offer transportation.
How many days in a week are the school buses used? How many days in a year?	When school is in session, they are used each day. 180 days.
Are there bike racks on your property? How many?	Yes. One bike rack
How many students drive to school?	100-125
Do students carpool? Is there an incentive to carpool?	Yes. Some carpooling. No incentives that I'm aware of.
Do students pay for parking passes?	Yes
Are there any other vehicles owned by the parish/school? Please list them and explain what their use(s) is/are.	1 Drivers Ed vehicle

ATTACHMENT 3 SELECTED PROGRAM EVALUATION RESPONSES

Our Lady of Lourdes
St. Matthews
St. Mary
Holy Spirit
Scecina Memorial High School



16 November 2019

Dear Archdiocesan Creation Care Commission:

This past summer Our Lady of Lourdes parish participated in the pilot Sustainability Project. The project was extremely well run, comprehensive in scope, and drew many parish members into the "looking around, noticing, and realizing what is realistic for us to do".

What has sprung from the plan given to us is a comprehensive set of goals and objectives. In addition, it has spurred the initiation of a robust, 9 member Creation Care Committee. This committee is moving forward to implement the plan. They are passionate about this need. They have embraced "Laudato Si". And they are determined to bring to our parish what it needs to be aware here, at home, and at work the principles and practices that are doable, practical and sustainable.

Thank you for setting us on this path.

Father Rick Ginther, Pastor

PROGRAM TESTIMONIALS

"The Archdiocesan pilot program on sustainability was extremely helpful to our Creation Care team and Holy Spirit Parish as we develop our Creation Care program and looks for ways to develop sustainable practices in our church and school communities. The thorough assessment of our practices and development of a proposed action plan have given our Creation Care team momentum and direction to focus on key areas of education, tree planting, collaboration with our school, and possible solar energy options. Having the archdiocesan group there as a resource and source of helpful information, will also help us continue to learn and improve as a team."

- Kerry Beidelman, Chair, Holy Spirit Creation Care Ministry

"I LOVED the program and hope they will continue it every three months or so. I want to invite the religious education director and the administrative assistant since they should also be aware of these things. I got an idea from the facility manager at Scecina High School to turn off the cold water on the water fountains (so that the water is at room temp instead), which usually runs 24/7. Nobody has complained a bit! I only see the facility managers at the yearly Asbestos training so it was also very nice to talk and share ideas!"

- Francisco Ruiz, St. Mary Catholic Church

"I already provided some reflections about the program in the evaluation of the pilot sustainability project that I turned in. To those reflections I can add that I really enjoyed our participation very much in the pilot project. I just wished I could have generated that same enthusiasm from staff and members of St. Matthew Parish. Nonetheless, I attended most of the workshops presented and learned quite a lot. Our parish benefited much from the energy evaluation of our facilities, and the future plan worked out for St. Matthew has set some goals and objectives for us to discuss and work towards achieving. If nothing else, participating in the pilot project has made us at St. Matthew more conscious of our use of energy, and how we need to be concerned about sustaining the environment of the world we live in. Would I recommend other parishes participate in this project? Indeed I would, but with the caveat to be sure to lay a solid groundwork with the parish beforehand, to get the Parish Council and the various commissions all on board. It is probably a good idea for the Parish also to seek to establish some kind of Creation Care Committee before getting involved, so there will be a group to spearhead participation with some enthusiasm and spur enthusiasm in others in the parish."

- Fr. Nick Dant, Pastor, St. Matthew Parish