



CATHOLIC SOCIAL TRADITION MINOR CAPSTONE

**“Recommendations from the World of Marketing
for Notre Dame’s Office of Sustainability”**

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INTRODUCTION

This report is the culmination of my Catholic Social Tradition minor at the University of Notre Dame, informed by my marketing major and my personal passion for sustainability. I was advised by Professor Bill Purcell in the area of Catholic Social Teaching and by Professor John Costello in the domain of social change marketing. Thank you to you both for your support.

During my time at Notre Dame, I have seen campus undergo many challenges related to sustainability. Even before the pandemic, we had our struggles — recycling has always been tough and the dumpsters are always infuriatingly full of donatable items after move-out — but COVID-19 exasperated things even further, especially during my sophomore year when every meal in plastic to-go containers. Still today, the Starbucks on campus refuses to accept reusable cups, North Dining Hall has replaced the once-beloved ceramic mugs with single-use paper cups, and students have never seemed to re-adopt the use of hand dryers instead of paper towels.

This capstone was born out of a desire to circle back to a paper I wrote freshman year, in which I examined some of the ways that Notre Dame could better encourage students to recycle. Since then, three years have elapsed and the Office of Sustainability has updated its recycling programs, but I am still hearing many of the same complaints (and excuses) from students about sustainability on campus that I experienced when writing that paper. Equipped now with my experience in the discipline of marketing, I am prepared to offer concrete suggestions that the Office of Sustainability can use to encourage sustainable involvement on campus.

EXECUTIVE SUMMARY

The Office of Sustainability at the University of Notre Dame has a robust and thorough strategic plan to implement sustainable practices and education on campus and in the rest of the world, informed by its identity as a Catholic university in line with Catholic Social Tradition, but it faces significant marketing challenges with Notre Dame students, especially regarding awareness and trust. A survey was conducted to assess student perceptions of the Office of Sustainability and sustainability on campus more generally, and responses included feedback like:

“There’s no obvious way to reach them, or even know that they exist or what they’re doing. Also there is zero recycling in Duncan” and

“I have never once heard anything from the Office of Sustainability so I would have to assume they are doing an inadequate job.”

The body of social change marketing research offers valuable wisdom that can be used to improve campus sustainability efforts and the perception thereof among students. Two particular models that can be applied to the Office of Sustainability’s marketing initiatives are the Identity Salience Model of Marketing Success and the SHIFT Model. Using this information and the campus survey, the following recommendations are made to the Office of Sustainability:

1. Partner with reputable on-campus organizations to increase the prestige of the Office and boost visibility for students.
2. Mimic the successful marketing campaigns in the dining hall to promote campus recycling programs and improve transparency.
3. Invite students to interact with the Office in casual, easily accessible settings.

SITUATIONAL ANALYSIS

Overall Mission and Strategy of the Office of Sustainability

Per the website for the Office of Sustainability, the current mission of the university regarding sustainability is as follows:

The University of Notre Dame strives to be a leader in sustainable operations, education and research, and a role model for responsible citizenship. Notre Dame recognizes its responsibility to conserve the natural environment while promoting long-term economic and social justice for all members of society and works to foster a pervasive focus on the connection between environmental stewardship and the Common Good.¹

The mission of the Office meets the standard three pillars of “sustainability” as commonly defined: to maintain and support the **environment**, **societal well-being**, and **economic success**.

The Office’s sustainability strategy makes these dimensions even more explicit, stating that

1. University actions should first benefit people—not just the current generation or today’s community but future generations and future communities. *[Social pillar.]*
2. Decisions and actions must respect the planet’s inherent value and consider both immediate and long-term impacts on its resources. *[Environmental pillar.]*
3. We must consider the economic impacts of our actions to ensure the University’s financial health for decades to come.² *[Economic pillar.]*

¹ University of Notre Dame Office of Sustainability. *Mission*. <https://green.nd.edu/mission/>.

² University of Notre Dame Office of Sustainability. (2017, May). *Sustainability Strategy Executive Summary*. <https://green.nd.edu/mission/university-of-notre-dame-sustainability-strategy/sustainability-strategy-executive-summary/>

Relation to Catholic Social Tradition

The University's sustainability mission and strategy do well to emphasize the person-centric approach to sustainability that is present in the doctrine of Catholic Social Teaching. The Church has long proclaimed the necessity of what Pope Francis calls an "integral ecology" in *Laudato Si*, though he was the first to use this specific terminology. In this framework, the fragmentation of relationships is directly related to our poisoned relationship with God's gift of creation, and vice versa. We are not able to separate one from the other, as much as we might try, because we are inherently connected to creation and must act as good stewards of this gift. This idea is repeated in one CST document after another, even those decades apart:

- In Pope John Paul II's World Day of Peace message in 1990, he asserts that "if an appreciation of the value of the human person and of human life is lacking, we will also lose interest in others and in the earth itself"³;
- In *Caritas in Veritate*, Pope Benedict XVI writes that "reducing nature merely to a collection of contingent data ends up doing violence to the environment and even encouraging activity that fails to respect human nature itself"⁴;
- And in *Laudato Si*, Pope Francis declares that "today, the analysis of environmental problems cannot be separated from the analysis of human, family, work-related and urban contexts, nor from how individuals relate to themselves, which leads in turn to how they relate to others and to the environment. **There is an interrelation between ecosystems**

³ John Paul II. World Day of Peace message (para 13). *The Holy See*, 1 Jan. 1990, https://www.vatican.va/content/john-paul-ii/en/messages/peace/documents/hf_jp-ii_mes_19891208_xxiii-world-day-for-peace.html.

⁴ Benedict XVI. *Caritas in Veritate* [Papal Encyclical] (para 48-b). *The Holy See*, 29 Jun. 2009, https://www.vatican.va/content/benedict-xvi/en/encyclicals/documents/hf_ben-xvi_enc_20090629_caritas-in-veritate.html.

and between the various spheres of social interaction, demonstrating yet again that ‘the whole is greater than the part.’”⁵ [Emphasis added.]

In the true vision of “integral ecology,” we must tend to our relationships and strengthen our societal ties to curb further ecological disaster.

Strategic Sustainable Goals

The University’s Comprehensive Sustainability Strategy focuses on six areas of concern:

1. Energy & Emissions
2. Water
3. Building and Construction
4. Waste
5. Procurement, Licensing, and Food Sourcing
6. Education, Research, and Community Outreach⁶

The Office of Sustainability website details information about the University’s specific goals in each of these areas, successes that have been achieved, and the members of working groups meant to assist the completion of these strategic items. The website documents progress on each of these issues, though the most recent update to the progress tracker is more than two years out of date⁷.

⁵ Francis. *Laudato Si* [Papal Encyclical] (para 141). *The Holy See*, 24 May 2015, https://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html.

⁶ University of Notre Dame Office of Sustainability. (2017, May). *Sustainability Strategy Executive Summary*. <https://green.nd.edu/mission/university-of-notre-dame-sustainability-strategy/sustainability-strategy-executive-summary/>

⁷ University of Notre Dame Office of Sustainability. (2021, Jan.). *Sustainability Strategy Progress*. <https://green.nd.edu/mission/university-of-notre-dame-sustainability-strategy/sustainability-strategy-goals/>

SOCIAL CHANGE MARKETING RESEARCH

A Generic Definition of Marketing

Although marketing is linked nearly inextricably to consumerism, advertising, and business growth, **the discipline is at its core about the transaction of values between two parties**⁸.

“Values” can include the traditional economic benefits associated with purchasing and selling, but they can also include feelings, social gratification, and countless other intangible benefits.

Research regarding this “generic” perspective of the discipline defines marketing by a set of four axioms:

- I. “Marketing involves two or more social units, each of which consists of one or more human actors;
- II. At least one of the social units is seeking a specific response from one or more other units concerning some social object;
- III. The market’s response probability is not fixed [i.e. the desired response is not a given];
and
- IV. Marketing is the attempt to produce the desired response by creating and offering values to the market.⁸”

Under this definition, the Office of Sustainability is absolutely in the business of marketing because it wants students to involve themselves in its operations, so it can and should use the available research of the discipline to improve its success in changing behavior. The most useful body of research for the Office is that related to nonprofit marketing and general prosocial

⁸ Kotler, Philip. “A Generic Concept of Marketing.” *Journal of Marketing*, vol. 36, no. 2, 1972, pp. 46–54, <https://doi.org/10.1177/002224297203600209>.

marketing, and this report will examine two specific studies whose conclusions can directly impact the success of sustainable operations at Notre Dame.

Identity Salience Model of Marketing Success

Relationships are at the core of NPO marketing, and identity salience (i.e. reinforcing students' self-perceptions of themselves as sustainable) is an incredibly strong way to succeed in soliciting a desired action:

“We argue that nonprofit success results from four major relationship-inducing factors: **participation, reciprocity, prestige, and satisfaction**. However, these factors do not promote relationship marketing success directly. Rather, we model these relationship-inducing factors as influencing success through a key mediating construct—identity salience”⁹.

The theories as related to the Office of Sustainability include the following:

- I. **Participation** in activities related to sustainability will increase the salience of students' identity as “sustainable individuals,” and therefore produce an improvement in their relationship with the Office of Sustainability.
- II. **Reciprocity** on behalf of the Office should improve students' positive feelings towards the organization because “perceived reciprocity by donors is an important part of the ‘psychological contract’ that nonprofits have with their donors”⁹.
- III. The **prestige** of an organization will correspond to higher identity salience on the part of students; research proposes that “nonprofits might enhance the prestige of their

⁹ Arnett, Dennis B., et al. “The Identity Salience Model of Relationship Marketing Success: The Case of Nonprofit Marketing.” *Journal of Marketing*, vol. 67, no. 2, 2003, pp. 89–105, <https://doi.org/10.1509/jmkg.67.2.89.18614>.

organizations by eliciting the support of celebrities,” which could be extended to “on-campus” celebrities in the case of the Office of Sustainability.

- IV. Students who identify higher **satisfaction** regarding their sustainability experiences at Notre Dame will act more favorably towards the Office of Sustainability in future opportunities.

The researchers who identified these four factors found that **participation** and **prestige** were the most impactful at building relationships through increased identity salience.

SHIFT Model

Another model of marketing research in the area of prosocial behavior change is the SHIFT model, which explores how marketers can bridge the gap between consumers’ favorable attitudes towards sustainability and their intentions of acting sustainability (or buying sustainable products)¹⁰. The model discusses five levers to pull in this pursuit:

- **Social Influence**, including social norms, social identities, and social desirability.
- **Habit Formation**, including implementation intentions, making it easy, prompts, incentives, and feedback.
 - The paper also offers interventions to break unsustainable habits, including discontinuity to break bad habits and penalties, though it suggests that the above positive behavior change strategies are more desirable.
- **Individual Self**, including the self-concept, self-consistency, self-interest, self-efficacy, and individual differences.

¹⁰ White, Katherine, et al. “How to SHIFT Consumer Behaviors to Be More Sustainable.” *Journal of Marketing*, vol. 83, no. 3, 2019, pp. 22–49, <https://doi.org/10.1177/0022242919825649>.

- **Feelings and Cognition**, including negative emotions, positive emotions, information, learning and knowledge, eco-labeling, and framing.
- **Tangibility**, including matching temporal focus, communicating local and proximal impacts, concrete communications, and encouraging the desire for intangibles.

These two models provide a framework which the Office of Sustainability can use to create more effective marketing campaigns and programs to reach students.

CAMPUS SUSTAINABILITY SURVEY

Student Survey Design

To better understand students' feelings and cognitions regarding the Office of Sustainability, a survey was created and sent to Notre Dame students to invite feedback regarding the perceived value of the Office on several criteria. The survey asked students to do the following:

- Rate the effectiveness of eight different campus sustainability initiatives;
- Rate the Office's level of transparency regarding its operations;
- Indicate prior engagement (or lack thereof) with the Office's website, green.nd.edu;
- Share the Office's greatest strengths, as perceived by the respondent;
- Share the Office's greatest weaknesses, as perceived by the respondent;
- Rate the level of importance that sustainability carries for the respondent personally;
- And share any additional thoughts, questions, or concerns regarding the Office of Sustainability or sustainability on campus in general.

The survey captured 41 complete responses. Scaled questions were analyzed and compared for statistically significant relationships, and open-ended responses were broken up into chunks based on content. Each individual thought was coded first as positive or negative, then sorted into one of 12 recurring themes (corresponding to four of the six sustainable strategic goals of the University):

- Energy [*Energy & Emissions*]
- Carbon Emissions [*Energy & Emissions*]
- Construction [*Building & Construction*]

- Dining Halls [*Waste*]
- Plastic waste [*Waste*]
- Recycling [*Waste*]
- Appeal of the Office [*Education, Research, and Community Outreach*]
- Education/Outreach [*Education, Research, and Community Outreach*]
- Transparency [*Education, Research, and Community Outreach*]
- Visibility of the Office [*Education, Research, and Community Outreach*]
- Catholic Social Teaching
- Duncan Student Center

The frequency of each theme was recorded on both positive and negative dimensions, and proportions were calculated to understand the relative commonalities of students' perceptions of campus sustainability efforts.

Open-Ended Survey Question Results

While the Office of Sustainability is not new to Notre Dame's campus, it faces a considerable lack of awareness and lack of trust from the students it hopes to serve, though it generally succeeds in the area of education. It was revealed that the greatest perceived strengths of the Office are the following, in respective order:

- Sustainability in the dining halls (regarding both decreased food waste and availability of plant-based options), with 36% of positive comments relating to this theme;
- Education and outreach (especially in academic settings such as classes), at 20% of positive feedback;
- Reduction of carbon emissions, at 12%;

- and sustainable construction, also at 12%.

Potentially even more important, students were also asked to share their opinions on the greatest perceived weaknesses of the Office, and that request prompted 46 negative pieces of feedback.

That nearly doubles the amount of positive responses that were coded — just 25. From the critical feedback, it was determined that the greatest perceived weaknesses of the Office are the following, in respective order:

- Visibility of the Office and Awareness among students about its existence, at 24% of total negative feedback;
- Recycling, at 22%;
- Transparency of the Office, at 13%;
- and plastic waste, also at 13%.

Understanding the sustainability initiatives which students perceive positively and negatively is critical in building effective communications and marketing efforts. The recommendations section of this report will integrate these perceptions with prevailing marketing research in the area of social change.

Scaled Survey Question Results

The results of the scaled survey questions reflect the findings of the open-ended questions regarding students' perceptions of positive and negative aspects of the Office of Sustainability and its operations. On a scale from “Not at All Effective” to “Extremely Effective,” the eight

campus sustainability initiatives included in the survey are grouped below based on students' median responses:

- Not at All Effective:
 - Properly recycling eligible campus waste
- Slightly Effective:
 - Reducing campus carbon emissions
 - Reducing campus water waste
 - Decreasing campus use of single-use plastics
 - Decreasing total campus waste sent to landfill
- Moderately Effective:
 - Reducing campus food waste
 - Offering plant-based campus dining options
 - Offering sustainability-related courses for students
- Very Effective: none.
- Extremely Effective: none.

These results support the hypothesis that the Office of Sustainability's greatest perceived strengths pertain to its efforts in the dining hall and in sustainability-related outreach in classrooms, though reducing carbon emissions was rated as less effective than expected given the amount of positive comments specifically naming that as a strength of the Office. The negative perception of the effectiveness of campus recycling programs supports the conclusion that recycling is one of the Office's greatest perceived weaknesses on campus.

Further analysis was completed to decide whether statistically significant relationships exist between the following question pairs:

- Have you ever had a question about campus efforts regarding sustainability? and How important is sustainability to you personally?
 - This relationship was examined to determine whether a high identity salience of oneself as a sustainable individual would drive the prosocial behavior of seeking out answers to sustainability-related questions on campus.
 - This is the only relationship of the four that is statistically significant, suggesting that students who value sustainability highly are more likely to engage with campus resources to answer their questions about the topic.
- How important is sustainability to you personally? and Have you visited the Office of Sustainability's website, green.nd.edu?
 - This relationship was examined to determine whether a high identity salience of oneself as a sustainable individual would drive the prosocial behavior of engaging with the Office of Sustainability's website.
 - This relationship is not statistically significant.
- Please rate the Office of Sustainability's level of transparency regarding its operations. and Have you visited the Office of Sustainability's website, green.nd.edu?
 - This relationship was examined to determine whether students who perceived the Office of Sustainability to be inadequately transparent had engaged with the Office's website before coming to that conclusion, or if their perceptions are influenced by other factors.
 - This relationship is not statistically significant.

- Which dorm do you live in? and [How would you rate the effectiveness of Notre Dame's Office of Sustainability on] Properly recycling eligible campus waste[?]
 - This relationship was examined to determine whether students' residence halls affect their perception of campus-wide recycling efforts, especially because dorms are the only identifiable places where recycling is accepted on campus¹¹. The webpage meant to direct students and faculty to other recycling bins is unavailable as of this writing¹² and for an undetermined period of time beforehand, but a search indicates that it was definitely active as of September 2022¹³.
 - This relationship is not statistically significant.

¹¹ University of Notre Dame Office of Sustainability.
<https://green.nd.edu/get-involved/student-opportunities/new-student-orientation/>.

¹² University of Notre Dame Office of Sustainability. *Campus Recycling*.
<https://green.nd.edu/resources/recycling-resource/campus-recycling/>.

¹³ University of Notre Dame Office of Sustainability. *Campus Recycling*. Archived at Wayback Machine (<https://web.archive.org/>); citing a capture date of 26 Sep. 2022.
<http://web.archive.org/web/20220926000122/https://green.nd.edu/resources/recycling-resource/building-recycling-locations/>.

RECOMMENDATIONS

- I. Partner with reputable on-campus organizations to increase the prestige of the Office and boost visibility for students.** Feedback from students in the survey suggests that students can not identify successful Office of Sustainability initiatives or presence on campus. According to the identity salience model of marketing, this absence of prestige harms students' willingness to interact with the Office and its programs. Two suggestions to improve visibility and prestige:
 - A. Work with core departments, like the Division of Student Affairs or Campus Ministry, to reach students through channels they respect. Each of those offices has its own newsletter, for example, and the Office of Sustainability might consider promoting its initiatives there and inviting students to involve themselves with the Office.
 - B. Use prominent campus figures to promote the office on social media. The leprechaun, student government officials, rectors — making sustainability a more prominent socially desirable value will encourage prosocial behavior.

- II. Mimic the successful marketing campaigns in the dining hall to promote campus recycling programs and improve transparency.** Students perceive Grind2Energy as moderately effective at reducing campus food waste, which is unsurprising considering the exposure to promotion that students experience regarding the initiative; it has appeared in Moreau classes, on the Jumbotron at football games, on signs in the dining hall, at waste weighing nights during the dinner rush hour. The single-stream recycling

initiative is relatively invisible, and improvements can be made to help combat the dismal perception that students hold about recycling efforts on campus:

- A. Publicly share more information about the recycling program. In keeping with the SHIFT model, students need more education about what it actually is for their feelings and cognition about the initiative to change. Questions to consider answering: where does campus actually send its recycling? How much of what gets put in blue bins on campus gets properly recycled?
 - 1. This would also improve campus perceptions of transparency. Even though the Office has hosted listening and learning sessions on the topic of recycling, students want to be able to access this information easily and at any time.
- B. Publish a schedule on the Office's website about when recycling is collected on campus. This not only helps with habit formation, as students will be able to anticipate when the blue totes will be picked up and act accordingly, but it also improves the level of transparency regarding sustainability initiatives.
- C. Fix the "campus recycling" webpage that is linked on posters all over campus. If the QR code is scanned, students are brought to a broken link. This not only hurts the perceived competency and prestige of the Office, but it hurts the level of transparency that students feel they are getting.

III. Invite students to interact with the Office in casual, easily accessible settings.

Encouraging participation in even minor activities can build the relationship between the Office of Sustainability and students according to the identity salience model.

- A. For example, the aforementioned recycling listening and learning sessions were an incredible opportunity to invite students in, but for anyone who could not or would not attend, there is no way to access any of the information discussed in those sessions.
- B. The Office might consider going to students instead of expecting that they come to the Office. Representatives could speak at hall councils, held every week in dorms or they could practice more consistent tabling in dining halls and student centers.