TAX INCENTIVES FOR GREEN BURIAL

Victoria J. Haneman*

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INTRODUCTION

Every living being is doomed to decay and die and decay some more.1 Death is inevitable, and the disposal of our dead is a fundamental global activity with the potential to have significant environmental impact. In the United States, the environmental toxicity of “traditional” modern burial is stark.2 A cosmeticized body is pumped with three gallons of embalming fluid (contain-

* Frank J. Kellegher Professor of Trusts & Estates, Creighton University School of Law. My heartfelt gratitude to research assistants Ryan Baker and Ty Medd for their tireless efforts with taming unruly footnotes. The usual disclaimers apply.

1 Well, almost every living being. It is worth mentioning that there are reported cases of “incorrupt” corpses—including Saint Paula Frassinetti and Blessed Anna Maria Taigi. To be incorrupt means that although the corpse should have putrefied or decayed, it did not, without scientific explanation. Elizabeth Harper, *Photographing the Real Bodies of Incorrupt Saints*, SLATE (Aug. 14, 2015, 11:10 AM), https://slate.com/human-interest/2015/08/photographing-the-real-bodies-of-incorrupt-saints.html [https://perma.cc/AXN4-8EHY]; Caitlin Doughty, *The (Not Really so Very) Incorrupt Corpses*, THE ORD. OF THE GOOD DEATH (June 5, 2014), http://www.orderofthegooddeath.com/really-whats-incorrupt-corpses [https://perma.cc/FF2Q-5QF6].

2 Historical burial practices have varied widely, from consumption to dissection to burning to burying. For purposes of this Article, “traditional” modern burial practice refers to the traditions over the past century in the United States. For more information on historical practice, see GARY LADERMAN, REST IN PEACE: A CULTURAL HISTORY OF DEATH AND THE FUNERAL HOME IN TWENTIETH-CENTURY AMERICA (2003).
ing chemicals such as formaldehyde\(^3\) that eventually leaches through metal and wood and into the ground.\(^4\) An estimated 5.3 million gallons of embalming chemicals\(^5\) are buried annually in what are essentially luxury landfills-slash-golf-courses, with landscaping and grass to maintain and mow,\(^6\) in coffins that are typically constructed of nonbiodegradable chipboard.\(^7\)

The death care industry\(^8\) draws consumers down one of two normative paths—casket or cremation—with the latter viewed as the more eco-friendly alternative.\(^9\) And while it is certainly greener than traditional burial, incineration cremation falls short of being labeled a green alternative. Fire-based cremation utilizes significant resources and energy, attributable to the substantial quantity of fossil fuel required to burn human remains at 1,562°F (850°C)\(^10\) to reduce a corpse to ash. Pollutants are generated in doing so,\(^11\) with an average of 540 pounds of carbon dioxide being released in the atmosphere per cremation (or 250,000 tons annually).\(^12\) Further, incineration of dental fillings releas-

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\(^3\) Embalming fluids often contain a combination of formaldehyde, chemicals like methanol and ethanol, and water. Let’s look a little more closely at that first ingredient, since formaldehyde can comprise up to 50 percent of a typical embalming fluid. Outside the funeral home, formaldehyde is used in medical labs as a tissue preservative and in pesticides and fertilizers. It’s also a flammable, strong-smelling gas that’s released from a variety of sources—cigarettes, exhaust pipes and building materials among them—and a known carcinogen. . . . So drinking a little bit of formaldehyde won’t kill you, right? Actually, it probably will. Drinking a little (thirty) milliliters of formalin—a solution made up of water, menthol and 37 percent formaldehyde—can kill a human.


\(^7\) Marina Kamenev, "Aquamation: A Greener Alternative to Cremation?", TIME (Sept. 28, 2010), http://content.time.com/time/health/article/0,8599,2022206,00.html [https://perma.cc/3L79-NDW3].


es mercury fumes into the environment; an estimated 320 pounds (according to the Environmental Protection Agency) or as much as 6,000 pounds (according to environmental activists) of mercury per year.

This tradition-steeped industry has projected domestic annual revenues of $68 billion (by 2023), and, interestingly, the industry has slowly started to “go green.” A survey conducted by the National Funeral Directors Association found that 53.8 percent of respondents were interested in green burial options. Changing the way in which one is buried will not solve the problem of climate change, but it does respect the notion that one’s last act on earth should not be to harm it. A commitment to being environmentally friendly requires that the scope of all human activity be integrated into the biosphere in a way that is sustainable. And though death will come to every living organism on the planet, the green disposal of one’s corpse remains a topic rarely discussed.

Industry norms are on the brink of disruption: there is capital investment into new innovative death service technologies (e.g., Funeralocity and WeCroak); green funeral tech startups are dramatically broadening available options for reintegrating human remains back into the environment in an eco-friendly manner; and the alt-death or death positive movement seeks to infuse

13 “[It is estimated that one third of Sweden’s mercury emissions come from crematoria.” Is Promession the Ultimate Ecological Goodbye?, FUNERAL MAG., http://www.funnelmagazine.co.uk/promession [https://perma.cc/AK6F-KKYN].
18 Natasha Bernal, Funeral Tech Startups Expand Your Posthumous Possibilities, WIRED (Jan. 12, 2020, 10:00 AM), https://www.wired.com/story/tech-is-making-funerals-weird [https://perma.cc/6G7J-F9L5] (“Technology companies have long bemoaned the fact that the market is dominated by old-fashioned funeral directors who can mark prices up by between 300 and 600 percent.”).
19 The WeCroak app sends five daily reminders that we are all going to die, to facilitate preneed planning. John Leland, The Positive Death Movement Comes to Life, N.Y. TIMES (June 22, 2018), https://nyti.ms/2KahXYx [https://perma.cc/58FY-UPXL].
the human experience back into death. Unfortunately, a myriad of market failures and obstacles are impeding that disruption. The grief-stricken consumer does not behave like the typical consumer and is forced to deal with an extraordinarily expensive expenditure at a time when he or she is particularly vulnerable and cognitively impaired. Information is constrained by nature of the investment, and the average consumer is only aware of the prices and options made available by the first funeral home consulted. Despite the fact that pre-need planning and prepayment promise potential for change, the average consumer waits to make a monetary investment in this space until age sixty-five (via installment). The options for funeral prepayment are limited, with disadvantages that frequently outweigh benefits.

The thesis of this Article is equal parts positive, normative, descriptive, and prescriptive—plumbing the depths of our modern disconnection from death, the need to transition human remains in an environmentally friendly manner, the importance of pre-need or pre-death planning and prepayment to protect the grieving consumer, and the power of advancing important social policy through a green tax credit. An overview of the death industry in the United States (including traditional modern burial and funeral custom) will be explored in Part I, as well as consideration of fire-based cremation and disposal of “cremains.”

21 If you happen to die in North America, this is probably what will happen next: Someone will pause for a moment in front of your corpse and then make a phone call. They’ll call either a funeral home or a local government agency, depending on how much money you have. Some minutes later—I’ve never timed the interval, but in my experience it’s always at the crossroads of too soon and eternity—two people will show up in suits to take your body away.

22 Kiley, supra note 9.


24 “Your funeral director won’t tell you a green burial will save you two-thirds of the cost, or that the expensive shiny brass coffin handles you paid extra for will be thrown in a tub and sold as scrap metal . . . .” Id.

25 Unusual for a large purchase, “[m]ost people go to the same funeral home their family has always used, and just say ‘yes’ to everything . . . .” Kelli B. Grant, Amid the Tears, Don’t Overpay for Funeral Costs, CNBC (Sept. 27, 2016, 1:57 PM), https://www.cnbc.com/2016/09/22/comparison-shopping-funeral-costs-can-yield-big-savings-.html [https://perma.cc/2GA-L-8KEK].

There is a surprising gap in readily accessible information with regard to green burial in the United States, and Part II will explore the disposition of human remains as an eco-friendly process—weighing the wide variety of non-normative options presently available. Change is creeping into a tradition-steeped industry as the alt-death movement gains traction and there is increased interest in green death care industry technologies. In Part III, this Article will trace through the many reasons why this space is poised for positive disruption. Part IV will consider the precedential use of tax incentives to advance green technology and will propose the following structure for a “green burial” tax credit:27 a Pigouvian subsidy in the form of a refundable tax credit for qualified expenditures related to the nonrefundable prepayment of expenses arising from “sustainable disposition or transition of human remains.”

I. END OF LIFE OPTIONS

After the Civil War, with the rise of urbanization, American funeral custom in the United States shifted from modest home funerals to more costly events hosted by small, full-service funeral homes.28 As the popularity of the American funeral gave way to exorbitant costs and potential exploitation, the Federal Trade Commission issued regulations in 1982 designed to protect the grieving consumer.29 And though these rules remain in force today, the death care industry is arguably in the early stages of yet another shift. Part I of this Article explores modern burial and funeral practice in the United States, and also considers fire-based cremation and disposal of “cremains.”30

A. Modern Burial and Funeral Custom in the United States

Traditional modern funeral and burial in the United States varies dramatically based upon the religious rituals observed. A Jewish burial is a unique combination of custom (“minhag”) and commandment (“mitzvah”), with the deceased being interred in a plain wood box soon after death.31 Those of the Muslim faith also believe that the decedent should be buried as soon after death as possible.32 Although some Buddhists opt for burial, cremation is the prefer-

27 “Green burial” is used here for ease of reference to refer to all green death care industry technologies that would be supported by the tax credit proposed in Part IV of this Article.
29 Id.
30 Cremains, CAMBRIDGE ENGLISH DICTIONARY (2020), https://dictionary.cambridge.org/us/dictionary/english/cremains [https://perma.cc/8VLD-JPZU] (defining “cremains” as “the ashes that remain after a dead body has been cremated”).
ence, with funeral attendees customarily wearing white.33 Christian traditions vary widely, and though burial has been traditional, some churches make allowances for modern options such as cremation.34 When the deceased is an atheist, or not affiliated with a specific religion,35 usually a non-religious or humanist funeral is planned—which is a religion-less funeral with a focus on celebration of life and attendees referred to as celebrants.36 Recognizing that the process will vary based upon religious affiliation, a traditional end-of-life processing of human remains generally has three distinct stages: the pre-funeral or viewing phase, the funeral phase, and the burial site phase.

Visitation or viewing of the deceased takes place one or more days before the funeral in a service that may be called a “viewing” or a “wake.” With an open casket, the deceased may have been prepared for viewing through the application of cosmetics and a preservation process called embalming. No state law requires embalming—although some states require that refrigeration be used in lieu of embalming.37 If the human remains have been damaged or maimed, or an open casket viewing will be too emotional for attendees, relatives of the deceased may instead opt for a closed casket wake. The viewing typically takes place at a funeral home or a church and may conclude with a prayer.

As with the viewing, the funeral service may take place at either a funeral home or a church. These ceremonies typically involve religious rites, prayers, works of comfort from clergy, and eulogies from relatives or friends of the deceased. For some religious denominations, eulogies are a departure from religious traditions and are prohibited.38 Mourners sometimes take one last oppor-

tunity to view the body of the deceased before or after the funeral, before closing the casket for the last time. It is not uncommon for specially chosen pallbearers to carry the casket from the funeral service to the vehicle that will be transporting the casket to the hearse, for transport to the burial site or crematorium.

If the burial site has been prepared in advance, a procession of mourners may travel from the location of the funeral to the burial site (i.e., a grave, tomb, or mausoleum). Although the casket usually remains closed at the burial site, there are religious traditions that reopen the casket one last time for mourners to say final farewells. A modern trend is the use of therapy animals at the burial site to comfort mourners. It is not unusual for a luncheon or gathering to be held after the burial. Such gatherings may involve a food and beverages and sometimes take the tone of a festive celebration of the deceased.

A private funeral and burial process happens when the relatives of the deceased would like members of the public to be excluded. Private services may be preferred if the deceased is involved in some type of controversy that will draw protesters, media, or spectators (e.g., when the deceased is a convicted criminal, crime victim, etc.). Such services may also be chosen if the deceased was stillborn or an infant or if the family simply cannot emotionally cope with anyone being present outside of the family.

B. Traditional Cremation and Disposal of “Cremains”

The elaborate or traditional funeral ceremony and burial is starting to become antiquated in many parts of the country and the world. Funeral homes are beginning to see revenues decline as more people are unchurched (only 36 percent regularly attend services), more people are concerned about the environment—

40 “The National Funeral Directors Association doesn’t keep track of how many funeral homes in the U.S. own therapy dogs, but the number has been on the rise in the last few years, said spokeswoman Jessica Koth.” A. Pawlowski, When Humans Grieve, More Funeral Homes Are Offering Therapy Dogs to Help, TODAY (June 22, 2017, 8:39 AM), https://www.today.com/health/therapy-dogs-funeral-homes-help-mourners-process-grief-t112992 [https://perma.cc/V8P5-RGL5].
41 “Somber, embalmed-body funerals, with their $9,000 industry average price tag, are, for many families, a relic. Instead, end-of-life ceremonies are being personalized: golf-course cocktail send-offs, backyard potluck memorials, more Sinatra and Clapton, less ‘Ave Maria,’ more Hawaiian shirts, fewer dark suits. Families want to put the ‘fun’ in funerals.” Heller, supra note 22.
43 Heller, supra note 22.
environment, and fewer people have an interest in visiting gravesites. In 2016, incineration cremation surpassed traditional burial for the first time in the United States—55 percent in 2016, compared to 5 percent in 1970, with numbers projected to increase to 71 percent by 2030. Why the shift in approach? The answer may be as simple as economics—cremation is far cheaper than traditional burial, costing roughly a third as much as the average traditional burial. The average cost of a funeral in 2019 is $8,500 in the United States, which is a 227.1 percent increase from 1986 to 2017. This rising interest in cremation has arguably fueled increasingly personalized, innovative, and emerging technologies to facilitate the disposal of cremated remains or “cremains.” This section details the wide variety of new and emerging approaches to disposal of cremated remains, to make an important point: the public is unaware that it is unaware of the depth of options now available.

One popular example of a new approach to the handling of remains is memorial or remembrance jewelry, with everything from urn jewelry to jewelry infused with cremation ashes. One can also place remains into a commemorative hourglass urn, to be worn as a necklace or placed on display on a fireplace mantel. Holy Smokes, LLC in Alabama is a firm that specializes in loading cremated remains into ammunition. For the pizza lover in one’s family, re-

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45 Heller, supra note 22.

46 Incineration cremation refers to the fire-based method of cremation done at a crematorium. There are alternatives to this traditional approach to cremation. See infra Part II.


48 Id.


mains can be placed into a pizza box urn.53 Some funeral homes offer the ability to have cremated remains placed in fireworks.54 Companies—such as Memorials.com—allow one to have an “art in ashes” cremation painting done by a skilled artist who turns cremated remains into a work of art ready for display.55 Similarly, glass artisans can incorporate swirling ash designs from cremation remains into a memorial piece of glass artwork.56 US-based ceramics company Chronicle Cremation Design will create ceramic cups that incorporate ashes into the glaze.57 And Vinyl—with the slogan “Live on from beyond the groove!”—will press cremated remains into a vinyl record.58

Cremated remains can be turned into beautiful jewelry through companies willing to turn your deceased relative into a sparkling synthetic diamond or gemstone. In fact, a robust marketplace has arisen for so-called “cremation diamonds.”59 Carbon is extracted from remains through high temperatures (around 2,500°F) and is then subjected to intense pressure, which creates crystals that slowly form.60 The length of the process depends upon the color of the desired stone: yellow diamonds, thirty-five to seventy days; green diamonds, forty to eighty days; blue diamonds, sixty to 120 days; and colorless diamonds, forty to eighty days; green diamonds, forty to eighty days; blue diamonds, sixty to 120 days; and colorless diamonds,

54 At Greenlawn, the service starts at about $1,000, and $3,000 gets you a four-to-five-minute display with musical accompaniment. When Drobis offered the service, his company shot the fireworks from a boat off the Southern California coast, and he charged a starting price of $4,250. Both of these figures are cheaper than the average cost of a funeral.
58 The content of the 7–12-inch can range from the standard greatest hits, specially-composed tracks, audio of the deceased person’s voice, or even just plain silence so families can really hear their loved ones crackle! Like any kind of end of life arrangement, the price tag isn’t cheap. The minimum cost is £900 ($1,160) and with luxury features such as RIV artwork, the price can rise to around £3,500 (about $4,600).
seventy to 150 days. It is said that different remains will result in stones of different colors and hues, and the process is as individual as each person’s remains. The diamond may then be shaped and polished as desired by the consumer. The stones usually vary from 0.03 carats up to 2.0 carats. Price varies based upon the company hired to perform the process. Heart in Diamond prices range from $750 for a mini orange-yellow diamond to over $17,000 for a two-carat deep red diamond. LifeGem’s prices range from $2,999 for a 0.10 blue diamond to nearly $20,000 for a one-carat stone. Ever Dear claims to be the most cost-effective option, with prices ranging from $695 for a 0.10 yellow diamond to $18,200 for a 2.0 to 2.29 carat colorless or blue diamond. Algordanza will produce three rough-cut 0.20 carat diamonds for $6,299, so that multiple family members may have a commemorative diamond.

Some family members may feel as though the deceased individual is always a part of them—literally, not figuratively—and for these family members, a ritual tattoo may be an option. A ritual tattoo is one in which a small amount of cremation ashes (usually less than a tablespoon) is mixed with tattoo ink to create an ash-infused solution (sometimes colloquially referred to as “morbid ink”) that is used to indelibly etch a memorial or commemorative tattoo. These tattoos are controversial within the tattoo industry, and because only a small number are done each year, it is a relatively unregulated process. There is no data tracking memorial tattoos, but anecdotal tales suggest that these tat-

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61 Id.
62 Id.
63 Id.
69 Id.
70 “Adding people parts to one’s tat sounds like a helluva [sic] health-code violation. But Dr. Sandra Whitehead, the director of Program and Partnership Development at the National Environmental Health Association, says it’s no more dangerous or gross than non-human ink ingredients.” Beca Grimm, Tattooing a Dead Friend’s Ashes on Your Body Is the Ultimate Tribute, VICE (Feb. 14, 2017, 1:06 PM), https://www.vice.com/en_us/article/vvsmxx/tattooing-a-dead-friends-ashes-onto-your-body-is-the-ultimate-tribute [https://perma.cc/LU2U-LSJ7].
71 What to Do with Cremation Ashes: Tattoo Ink, supra note 68.
toos are itchier than traditional body art and should be avoided by those with sensitive skin.72

Alternatively, perhaps the deceased would have enjoyed knowing that their ashes were dispersed into the environment in a creative manner. For example, Disney custodians report that loved ones are dispersed at Disneyland and Disney World roughly once a month.73 For those who are interested in having a Viking burial, already-cremated remains can be placed in a wicker Viking ship that is then set aflame.74 Relatives may also purchase an ash scattering cannon online, which will shoot cremation remains up to seventy feet in the atmosphere.75 For the airplane-loving deceased, Fly a Spitfire will scatter ashes from a vintage airplane.76 Company Your Wings will drop ashes during a video recorded skydive, or you may participate as a tandem jumper and drop the ashes yourself.77 Eternal Ascent Society and Mesoloft will place remains into balloons that reach high altitudes before breaking and scattering ashes to the wind.78

Yet another option caters to the deceased who perhaps longed to travel into space. On June 25, 2019, Space X launched its Falcon Heavy rocket.79 One of the twenty-four satellites being launched into orbit contains cremains (or cremated remains) from 152 dead people.80 Space burial has been offered since

Id.81


Human ashes have been spread in flower beds, on bushes and on Magic Kingdom lawns; outside the park gates and during fireworks displays; on Pirates of the Caribbean and in the moat underneath the flying elephants of the Dumbo ride. Most frequently of all, according to custodians and park workers, they’ve been dispersed throughout the Haunted Mansion, the 49-year-old attraction featuring an eerie old estate full of imaginary ghosts. “The Haunted Mansion probably has so much human ashes in it that it’s not even funny,” said one Disneyland custodian.

Id.

74 17 Creative Cremation Ashes Ideas, supra note 57.


78 Id., supra note 74.


1992 when the NASA shuttle Columbia carried the remains of Gene Roddenberry on a space flight and then returned the remains to earth. Space burials include suborbital flights (the spacecraft is at the end of the atmosphere, where weightlessness is possible but orbiting is not), moon burials, and deep space or lunar flights. Celetis (founded in 1994) and Elysium Space (founded in 2014) both offer post-mortem celestial services, with the former having arranged for cremated remains to be transported to space on more than a dozen occasions. Family members are able to send between one and seven grams of remains to space for roughly $5,000 (for one gram of ashes for an orbital flight) or upwards of $12,500 (for deep-space or lunar flights).

A number of eco-aware cremains options are also available. Memorial Reef International offers an alternative to traditional burial by placing remains into a “reef ball,” which is a hollow egg of pH-balanced concrete that is then placed into an under-ocean memorial garden. The reef ball has a bronze plaque to honor the deceased and is easily located for future visits. “There are more than 1,800 Eternal Reefs placed off the coasts of Florida, South Carolina, North Carolina, Maryland, New Jersey, Texas, and Virginia.” Dorset-based Solace Reef sells memorial reefs that are placed off the coast of Weymouth in the United Kingdom.

For some, the beauty of a tree is replacing the tradition of a tombstone—which has led to the eco-conscious bio urn and planting system developed by The Living Urn. Cemeteries have tried burying cremated remains only to discover that the ashes can be quite harmful to vegetation because of high pH and

P2-G8MC].


83 Mosher, supra note 80.

84 Id.


86 What is a Memorial Reef?, supra note 85.


88 17 Creative Cremation Ashes Ideas, supra note 57. “Cremated remains are placed in pyramid-shaped ‘Solace Stones’ that are laid to rest on the sea bed.” Id.

sodium levels.\(^9^0\) The Living Urn uses RootProtect to neutralize harmful attributes of cremains, so that the growth of the memorial tree or plant is not inhibited.\(^9^1\) Any amount of cremated remains may be buried with the plant or tree.\(^9^2\)

Better Place Forests is a San Francisco-based start-up that has raised $12 million in venture capital funding in an effort to “redesign the entire end-of-life experience.”\(^9^3\) The company is buying forests in California, obtaining conservation easements to prevent development of the land, and selling the ability to feed cremated remains mixed with fertilizer to a specific tree.\(^9^4\) Thousands of trees have already been sold to the living, with costs varying based upon type of tree: $3,000 for those who wish to be placed by a young tree or less desirable tree species, up to $30,000 for those who wish to be placed to rest next to an old redwood (which can live for more than 700 years).\(^9^5\) One can pay $970 to be placed with others at the base of a community tree.\(^9^6\)

II. EMERGING OPTIONS

We are distanced from death in the United States: preferring the aging process to be invisible, the infirm to receive medical care in hospitals, and the dead to be whisked away to funeral homes.\(^9^7\) Our “death illiteracy” renders the consumer particularly vulnerable to purchasing unnecessary and expensive death

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\(^9^0\) Why Burying Ashes Is Harmful to the Environment, LET YOUR LOVE GROW, https://letyourlovegrow.com/blogs/blog/why-burying-ashes-is-harmful-to-the-environment [https://perma.cc/ZTN3-E2L4] (“The pH level of the cremated ashes is extremely high and will not allow for the natural release of the good nutrients within the cremated ashes. . . . In addition, cremated ashes also contain sodium in amounts that range from 200 to 2000 times what plant life can tolerate.”); see also Armani Goens, Cremation Ashes Will KILL Your Plants, Unless You Follow These Steps!, FUNERAL DIRECT (May 3, 2018), https://www.funeraldirect.shop/blogs/cremation-urns/human-ashes-tree [https://perma.cc/QSA6-TMUR].


\(^9^4\) Id.

\(^9^5\) Id.

\(^9^6\) Id. (“For an extra fee, customers can have a digital memorial video made. Walking through the forest, visitors will be able to scan a placard and watch a 12-minute digital portrait of the deceased talking straight to camera about his or her life.”).

products and processes. Enter the “death positive” movement and the end of concealment—a process of disruption intended to bring transparency, humanity, and personalization to the treatment of human remains. This movement comes at a time when a large segment of the population is aging into retirement, and at least one in five Americans are likely to be contemplating death. Part III further explores emerging options with regard to the transitioning of human remains.

An emerging trend by which survivors may memorialize remains is a process by which the body art of the deceased is preserved and professionally mounted behind UV-glass so it may be displayed. An Ohio-based company called Save My Ink Forever works with funeral homes to surgically excise and preserve tattoo art on a decedent (excluding tattoos on the face or genitals). More than one-third of Americans aged eighteen to twenty-nine have at least one tattoo, and there are more than 20,000 tattoo parlors in the United States. There is unquestionably a growing market of consumers who may be interested in such a product.

An expensive nontraditional option is mummification. Based in Salt Lake City, a religious organization called Summum subscribes to the belief that the spirit continues after death and is bereft by the destruction of its physical ves-

98 Chavez, supra note 49.
100 Chavez, supra note 49 (“While White patriarchy has spent the past hundred years shutting the doors and pulling the curtain—obfuscating and profiting from one of life’s most significant milestones—modern women are questioning whom our current system is serving and telling the funeral industry that its time is up.”).
101 Id. (“Gelbart’s body was brought home, to be washed and wrapped in a golden shroud by Barcham and Metzner. For Metzner, caring for his husband’s body was a natural continuation of the love and care Metzner provided him in life, allowing for a ‘healing journey through grief that the funeral industry wants to deny us,’ he explained. For the next three days, mourners could spend time with Gelbart at the couple’s home.”).
102 Older People Projected to Outnumber Children for First Time in U.S. History, U.S. CENSUS BUREAU (Oct. 8, 2019), https://www.census.gov/newsroom/press-releases/2018/cb1-8-41-population-projections.html [https://perma.cc/YC9P-ZLGK] (“This [age shift] will expand the size of the older population so that 1 in every 5 residents will be retirement age.”). The U.S. Census Bureau also noted that by 2030, “all baby boomers will be older than age 65.” Id.
sel—and mummification will ease the journey of the spirit to its next destination. It is a preservation process that takes four to six months to complete, with the mummified corpse stored in a hermetically sealed sarcophagus called a mummiform. This extravagant process is work- and cost-intensive, with prices starting at $67,000 (excluding the cost of the mummiform).

The practice of at-home funerals was a historical norm and is once again gaining traction. The rise of the positive death or alt-death movement in the United States is undeniable—and the movement is challenging conventional and commercial services. Called a family-directed funeral or home-based funeral, this approach allow relatives and loved ones to do much of the preparation of the corpse and to keep the deceased at home for viewing until it is time for burial or cremation. A home funeral generally must be planned in advance: states have different legal requirements as to how the deceased must be stored at home, and a handful of states have enacted formalities that make it an impossibility, including the requirement that a funeral home and/or funeral director be involved.

There is rising interest in the reintegration and transition of human remains back into the environment in a way that respects the planet—an area that has broadly been labeled “green burial.” Although historically regarded as a

107 Id.
108 Id.
109 Mummification Costs, SUMMUM, http://www.summum.org/cost.shtml [https://perma.cc/3CQJ-HLHK]. Although costs are not available for the mummiforms, animal mummification starts at $28,000, and the bronze mummiform is an additional $50,000 to $100,000. Namrata Dixit, Pet Mummification Makes Your Beloved Pal Immortal, LUXURYLAUNCHES (May 14, 2012), https://luxurylaunches.com/pets/pet_mummification_makes_your_beloved_pal_immortal.php [https://perma.cc/6VU9-P2CN]. Forms for pets weighing 61 to 100 pounds are priced at $50,000 to more than $100,000. Id.
111 Planning a Home Funeral, SEVENPONDS, http://www.sevenponds.com/after-death/planning-a-home-funeral [https://perma.cc/C3H9-XQZ7]. Family members prepare the body for viewing. Id. Rather than a chemical process attended to by a stranger in a funeral home, family members are able to wash the body of their loved one in their home, and apply favorite lotions, perfumes or colognes. Id.
112 Id.
113 Id.
waste product, the idea of human remains as a natural part of an organic cycle is starting to gain mass appeal. The green death industry (sometimes referred to as “green burial”) broadly encompasses any process that reintegrates human remains into the planet in an environmentally friendly way.

Incineration cremation is far more environmentally friendly than traditional burial but falls short from being ideal. One green alternative to fire-based cremation is a process gradually becoming legal in the United States: a form of alkaline hydrolysis known as aquamation (also resomation or bio cremation), which essentially liquifies a corpse, leaving behind bones that can be ground to produce ash. As with incineration cremation, families may use the resulting powder or ask to memorialize the deceased. Further, aquamation may be available when incineration cremation is not (e.g., when the casket of an obese corpse is too large for the crematorium).

Aquamation uses only 10 percent of the energy of a traditional cremation, produces no air emissions, and has been used for years to dispose of bodies donated for scientific use. The process of alkaline hydrolysis was patented in 1888, and yet, only fifteen states allow alkaline hydrolysis for commercial use.


— Kamenev, supra note 7 (“In 2009, TIME listed resomation as one of the year’s top 10 environmental ideas.”).


— David Trayner, Coffins of Obese Scottish People Are Too Big to Be Cremated, INDEPENDENT (Aug. 16, 2015, 10:53 AM), https://www.independent.co.uk/news/uk/home-news/scotland-obesity-coffins-too-big-crematoriums-10457621.html [https://perma.cc/HSZA-TYWB] (“Obese Scots are having to be buried rather than cremated as their supersize coffins are too big for furnaces, funeral directors have warned.”).


— Powell, supra note 118 (“Eight times a year a funeral director sets off by boat from Camp Pendleton Marine Corps base carrying about two dozen plastic bags filled with unusual human remains. The powder he pours overboard is from corpses that have been “cremated”—not by fire, but by liquid. That’s how the University of California, Los Angeles, disposes of bodies donated to science: by dissolving the flesh off their bones. The bones are then ground to dust and scattered into the sea two miles offshore, forming white rings that slowly float away into the Pacific Ocean.”).
as of 2018. Aquamation has not gained traction for commercial use for any number of reasons, but also owing in part to the hyperbolic tales woven by opposing legislators of boiling human remains and then flushing said remains down a drain. In at least one state, the legalization process was derailed by a legislator who was coincidentally a casket maker. And though the Vatican has not specifically addressed alkaline hydrolysis, local Bishops have decided that it is not an acceptable method of disposition for Catholics.

Green burial itself may take place in hybrid cemeteries (offering both conventional and green burial options), natural burial grounds (committed to sustainable, organic practices), or conservation burial grounds (to ensure perpetual protection of the land through deed restriction or conservation easement). Although green burials vary widely, there are three characteristics required of a burial for it to qualify as “green”: toxic chemicals are not used to preserve the human remains or maintain the burial ground, biodegradable containers or shrouds are used for burial, and practices prioritize restoration or


A 2010 bill to legalize alkaline hydrolysis in California failed, as reported by the Los Angeles Times, largely due to concerns over lack of data about how the liquid waste it creates might affect aging sewer pipes and employees’ health at crematoria—safety concerns that Fisher says he has addressed after years of testing with the City of Los Angeles. A second bill in 2013 for a pilot program in five funeral homes also failed to make it across the finish line. And the California Catholic Conference is urging the state’s Senate to vote “no” on the latest legislation, concerned that alkaline hydrolysis “does not appear to respectfully treat human remains.” Powell, supra note 118.

125 Kamenev, supra note 7.


127 The proffered rationale is that the waste product from the embalming process returns to the earth, whereas the waste product from alkaline hydrolysis flows to the sewage system as wastewater. Alkaline Hydrolysis: Questions and Answers from a Catholic Perspective, ARCHDIOCESE ST. LOUIS, https://www.archstl.org/Portals/0/Documents/Worship/AlkalineHydrolysisQandA.pdf [https://perma.cc/Y766-69LR].


129 Green Burial Characteristics, supra note 128.

130 Traditional cemeteries often require the use of vaults, or concrete liners lining the grave, so that the ground does not sink as decomposition occurs. Kiley, supra note 9.
preservation of the natural habitat. Some green burial providers eschew the use of non-native grave markers, opting instead for native grave markers or GPS coordinates. Interestingly, disruption is coming to the death care industry in the form of alternative green technologies. Human remains in the United States have normatively ended up in one of two places—either casket or crematorium. The alt-death movement is, however, taking traditional notions of green burial in previously unexplored directions with four promising green death care technologies: composting, promission, tree-nourishing pods, and mushroom mycelium-infused fabrics, each of which is discussed below.

The non-profit Urban Death Project, spearheaded by Seattle-architect Katrina Spade, proposed an alternative approach in the form of composting—a process that may be viewed as “cremation by carbon” or “organic reduction.” Composting of human remains is a natural process facilitated through human intervention that, when done correctly, produces no foul odors, does not attract vermin, will not pollute the water supply, and kills pathogens. The byproduct is an average of two wheelbarrows of dark humus that has the same scent as high quality topsoil.

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131 Green Burial Characteristics, supra note 128 (as compared to traditional cemeteries, which use concrete, plastic, vaults or liners, and exotic wood or metal caskets).
132 Id.
133 The American dead, like American voters, fall roughly into two camps. In this analogy, the conventional burial industry is like the Republican Party: a lot of suits, a lot of money, lobbyists to protect their interests, and a general acceptance that cutting down trees (for caskets), pouring concrete (for vaults), and putting toxic chemicals underground (embalming fluids) are simply part of the American way. Cremationists are more like the Democratic Party: slightly looser dress code, still interested in profit margins but perhaps not as fanatically (there is a lot less money to be made from a $400 urn than a $3,000 casket), and a belief that they are on the progressive side of history.

Kiley, supra note 9.
135 Kiley, supra note 9.
136 Tekle, supra note 110, at 143.
138 Tekle, supra note 110, at 138, 144; Layne, supra note 137.
The Urban Death Project’s human composting idea managed a pilot study in the summer of 2018 on six volunteers and successfully produced clean, odorless soil that passed all testing for pathogens and pollutants. Consequently, Washington became the first state to legalize human composting in May 2019. Recompose, the for-profit business organized by the founder of the Urban Death Project, anticipates that it will have its first facility running by the close of 2020. The CEO of Recompose estimates that this process will be offered to the public for $5,500.

The second promising funeral technology, promession, has yet to come to market. Promession is a process that has been compared to the Tibetan practice of “sky burial,” in that both recycle remains—the latter into food for animals and the former into soil. Swedish biologist Susanne Wiigh-Mäsak spent two decades researching this innovative, ecological option which essentially uses liquid nitrogen to freeze dry human remains. The corpse is exposed to

140 Although this is an ancient method of laying the deceased to rest, only one state has approved this composting method, over substantial objection of the Catholic Church. The Church representative stated that this approach runs contrary to Church doctrine in its failure to show enough respect for human remains. Julia Duin, *In Washington State, Humans Can Be Turned into Compost (Catholics Have a Problem with That)*, GET RELIGION (May 28, 2019), https://www.getreligion.org/getreligion/2019/5/26/in-washington-state-humans-can-be-turned-into-soil-catholics-have-a-problem-with-that [https://perma.cc/D33S-9Z63].
141 Kiley, * supra* note 139.
142 Id.
143 Id.
144 We are tentatively aiming for a price of $5500 for the Recompose service. For context, a green burial in Washington is around $6000, a cremation can range from $1000-$7000, and a conventional burial is $8000+. The price of a Recompose service will include transportation of the body to our facility from within the Seattle metropolitan area, filing of the death certificate, time with family and friends in our beautiful space, and the transformation of the body into soil. FAQ, RECOMPOSE, https://www.recompose.life/faq [https://perma.cc/C96Z-2PH5].
145 [A]n undertaker, sweat-drenched, hacks away with a machete at the naked corpse, while lamas chant prayers from a distance; super-sized vultures hop gleefully around the circle of chanting mourners; a human leg is wrenched from the torso by a bloody beak. It’s not necessarily appealing, but . . . sky burial has existed in various forms for thousands of years.
147 Id. at 148.
148 Id.
149 The function of the sky burial is simply to dispose of the remains in as generous a way as possible. Not only was Wiigh-Mäsak familiar with this, but she had received a letter from an “Indian priest” claiming that they were very interested in learning more about Promessa, as they are currently experiencing an inconvenient shortage of vultures.
temperatures below -196°C,\(^{148}\) and because the human body is roughly 75 percent water, all fluid is removed and the remaining solid is frozen.\(^{149}\) Mechanical vibration is applied to the extremely brittle frozen solid, causing the mass to reduce to dry, flesh-colored granules.\(^{150}\) These granules produce high-quality topsoil that is nurturing to plants, and when buried in a bio-degradable container, the granules and container will decompose within six to twelve months.\(^{151}\) A company was formed in 1997 to explore commercial implementation and asserts that there has been serious interest from countries such as South Korea and the United Kingdom; the potential for the technology even piqued the interest of NASA.\(^{152}\) There are now five Promessa Representatives covering fifteen states in the United States, with the goal of developing their markets through education and one day legalizing this technology.\(^{153}\)

Yet another promising funeral technology is Capsula Mundi or “world’s capsule.”\(^{154}\) Developed by an Italian start-up company, it is a biodegradable pod that is suitable for cremains or human remains.\(^{155}\) When the bio-plastic shell of the pod degrades, nutrients are fed to the tree sitting atop it.\(^{156}\) Although

\(^{148}\) The corpse is more or less turned into a popsicle. ELAM & PIELAK, supra note 144, at 149.

\(^{149}\) Within a week and a half after death, the corpse is frozen to minus 18 degrees Celsius and then submerged in liquid nitrogen. This makes the body very brittle and the vibration of specific amplitude transforms it into an organic powder that is then introduced into a vacuum chamber where the water is evaporated away.

\(^{150}\) ELAM & PIELAK, supra note 144, at 149.


\(^{152}\) The United Nations’ Outer Space Treaty (1967) prohibits the disposal of deceased astronauts in space and invited Wiigh-Mäsak to collaborate on temporary storage of deceased astronauts. ELAM & PIELAK, supra note 144, at 149–50.

\(^{153}\) In November 2019, the Kansas Attorney General issued a legal opinion setting forth that promession did not fall within the state definition of cremation. This is the first state in which an opinion was sought because Kansas has a comparatively broad definition of what constitutes cremation. Jonathan Shorman, *Can You Get Your Body Vibrated into Particles When You Die? Debate Unfolds in Kansas*, WICHITA EAGLE (Dec. 4, 2019, 12:04 PM), https://www.kansas.com/news/politics-government/article237888864.html [https://perma.cc/BH3X-TG9A].


\(^{156}\) Such burials are presently illegal in Italy, which requires wooden coffins lined with tin. Dragana Stepic, *I Want to Die, Like, Yesterday Just so I Can Be Buried in This Pod That*
such an approach is arguably legal in the United States, these pods have been developed only for cremains, with corpses reserved for later development.\(^{157}\)

The final emerging funeral technology is the Infinity Burial Suit,\(^{158}\) which is essentially a jumpsuit made from mushroom mycelium-infused fabric.\(^{159}\) The mushrooms are able to simultaneously decompose\(^{160}\) and clean toxic contaminants,\(^{161}\) a process known as mycoremediation.\(^{162}\) The Infinity Burial Suit retails for $1,500 with a two-to-three week delivery time in the United States.\(^{163}\)

Products similar in concept are being offered by other companies, including a pine wood surface to which the deceased is strapped and covered with woven netting infused with fungal spores that accelerate decomposition and absorb released toxins.\(^{164}\)


\(^{157}\) Erizanu, _supra_ note 154.

\(^{158}\) The burial wish of actor Luke Perry was to be buried in an Infinity Burial Suit. When he unexpectedly passed away in March 2019, his daughter took to Instagram to make the following statement about it: “My dad discovered it, and was more excited by this than I have ever seen him. He was buried in this suit, one of his final wishes. They are truly a beautiful thing for this beautiful planet, and I want to share it with all of you.” _Luke Perry’s Daughter Says He Was Buried in a Mushroom Suit_, NBC2 NEWS (May 4, 2019), https://www.nbc2.com/story/40417857/luke-perrys-daughter-says-he-was-buried-in-a-mushroom-suit [https://perma.cc/5DVK-CKQ3].


\(^{160}\) The founder of Coeio also formed the Decompiculture Society:

[A] group of people called decompinitans who actively explore their postmortem options, seek death acceptance, and cultivate decomposing organisms like the Infinity Mushroom. The Decompiculture Society shares a vision of a cultural shift, from our current culture of death denial and body preservation to one of Decompiculture, a radical acceptance of death and decomposition.


\(^{161}\) Human bodies contain high levels of toxins, including flame retardants, pesticides, dry cleaning residues, heavy metals, bisphenol A, etc. The Centers for Disease Control and Prevention estimate that the average individual has 219 chemicals in their body; hence, the need for mushrooms to break these down and make the surrounding soil cleaner.


\(^{162}\) Fiona MacDonald, _This Mushroom Suit Digests Your Body After You Die_, SCIENCEALERT (Feb. 16, 2016), https://www.sciencealert.com/this-mushroom-suit-digests-your-body-after-you-die [https://perma.cc/9EK5-KDSJ].


By popular demand, Infinity pet shrouds are also available both for physical pet remains as well as pet cremains. _Purchase, FOREVER SPOT BY COEIO, http://theforeverspot.com/purchase_ [https://perma.cc/N4K2-PN5L].

\(^{164}\) Gunesli Yalcinkaya, _Shaina Garfield Redesigns Death with Sustainable Coffin_, DEZEEN (Mar. 18, 2019), https://www.dezeen.com/2019/03/18/shaina-garfield-leaves-sustainable-cof
III. THE POTENTIAL OF DISRUPTIVE CHANGE

Although cemeteries have been rebranded through manicured landscaping and park-like surroundings, the reality is that they are essentially urban landfills that store one specific type of decomposing matter. Over the next decade, an estimated half a billion people will die, and it is not sustainable to traditionally inter any significant number of those corpses or to fill the planet with poisonous chemicals and shellacked non-biodegradable coffins. Annually, in the 22,500 cemeteries in the United States, it is estimated that the following will be buried within the earth: “14,000 tons of steel vaults; 90,272 tons of steel caskets; 2,700 tons of copper and bronze caskets; 1,636,000 tons of reinforced concrete vaults; 30 million board feet of hardwood caskets; and, 827,060 US gallons of embalming fluid.” These statistics do not include the mercury from dental fillings and medical devices—which may potentially leach into groundwater after human remains have decomposed.

The landscaped urban cemetery was the precursor to the modern day park, functioning in the nineteenth century as areas in which families came to relax, play, and picnic. This is a surprising juxtaposition to the modern cemetery—which serves as a center for toxic burial practices and environmental degradation. Experts have suggested that it is time to re-think human-designed lawn areas due to ecological impact; a conservative estimate is that there are three times more acres of lawn (including residential lawn, commercial lawn, golf courses, and cemeteries) in the United States than irrigated corn.

fin [https://perma.cc/X4EZ-7XK2].


166 Roughly 1,255,200 were traditionally buried in the United States in 2013 alone. Id.

167 “A traditional ten-acre cemetery holds enough embalming fluid to fill a small swimming pool.” Id.


170 Id.

171 Russell-Clarke, supra note 128.

172 “Cemeteries are among the most toxic of modern landscapes in both their immediate and ongoing environmental impacts and intensive use of resources.” Id.

173 “I tell ya, country clubs and cemeteries, the biggest wasters of prime real estate . . . Dead people, they don’t want to be buried nowadays. Ecology, right?” CADDYSHACK (Orion Pictures 1980).

the water consumed by lawn varies dramatically by region, there is no question that water wasted on acres of well-watered lawn is a national concern; with population growth in the United States, the water table has dropped several hundred feet in some locations. Saltwater is invading freshwater aquifers in some areas as water table recede—because, as the wise Aristotle observed, nature abhors a vacuum. Because lawns are not indigenous in most parts of the country, gasoline-fueled machinery that maintains human-designed lawn exacerbates carbon pollution and runoff from nitrogen-based fertilizers exacerbates water pollution. Despite the fact that lawn pulls carbon dioxide out of the air, the environmental impact of lawn far exceeds its benefit.

Urban cemeteries present several other challenges that are not often discussed. The first challenge is one of practical use: the urban need for housing (for the living) outweighs the need for cemeteries (for the deceased). As urban areas continue to grow in size, land that has traditionally been off-limits to development, such as cemeteries, will necessarily need to be reclaimed for housing—because shuttling a growing population to rural areas and away from mass-transit is not a viable solution. The second challenge is one of capacity: the centuries-old dilemma that urban cemeteries eventually run out of space. In other parts of the world, burial plots are used for an established period of time, after which remains are disinterred or deepened and the grave is leased

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177 Id.


179 Ecological Impact of Lawns, supra note 176.

180 Id.

181 Yirka, supra note 175.


184 In such a case the burial and its headstone are given the “lift and deepen” treatment. The existing burial is removed and replaced lower down in the grave so that another burial can be included on top. The headstone is either smashed and buried with them, or removed to an inconspicuous place.

by another. Although the reuse of graves is customary in a number of countries, the absurd notion one owns a rectangular four-foot by eight-foot patch of land for eternity has become normalized, and also, chemical preservation and burial methods geared towards delay of decomposition would need to be abandoned.

The tax incentive proposal advanced in Part IV is premised upon the foundational notion that there is an inescapable human dependence upon natural resources and all human needs must be met equitably and sustainably, which in this instance requires recognition that global population growth necessitates that different approaches be considered and explored to address disposal of human remains. There is an existential equity to “greening up death,” and harm to the planet is definitely an important motivation for government investment into this sector—but utilizing tax incentives to favor green death care technologies is a good idea for several other important reasons.

The death care industry is described as being “40 to 50 years out of date technologically and culturally.” It is one that is steeped in formalism and tradition, servicing uniquely vulnerable consumers. Few consumers engage in pre-need (or pre-death) death care planning or prepayment, and the consequence is that the grief-stricken consumer is generally limited to the options and prices offered at the one funeral home they contact. In fact, the percentage of consumers who contact more than one funeral home is only 18.9 percent. Grief impairs cognitive activity, leaving the consumer feeling distracted and unable to concentrate—and it is safe to say that the grief-stricken consumer does not behave like the typical consumer. There is cause to be concerned about the con-

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185 Tang, supra note 182.
186 Many other European countries regularly reuse old graves after a couple of decades. Britain does not, as a result of Victorian hygiene obsession, piecemeal regulation and national tradition. For many, an Englishman’s tomb, like his home, is his castle. That view is also common in the United States, which like Britain tends to regard graves as eternal and not to be disturbed—although the U.S. has a lot more space, so the burial crisis is less acute. U.K.’s Grave Crisis: Share a Plot with a Stranger?, NBC News (Oct. 29, 2009, 9:10 AM), http://www.nbcnews.com/id/33520796/ns/world_news-europe/t/uks-grave-crisis-share-plot-stranger [https://perma.cc/RL8E-8K3W].
188 “The funeral industry has always been about making your body immune to nature, preserving yourself in spite of it . . . .” Atkin, supra note 123 (quoting Phillip Olson, assistant professor, Virginia Tech).
190 NFDA Consumer Survey: Funeral Planning Not a Priority for Americans, supra note 16.
solidation that has occurred within this industry. And importantly, there is a structural chokehold on the range of prices and options presented to the consumer.

This is troubling in an industry in which pricing for the same services may vary wildly—with a survey from the Consumer Federation of America and Funeral Consumers Alliance noting price ranges of more than 200 percent in the same city. Because of outdated Federal Trade Commission (FTC) regulations, it is estimated that only 25 percent of the funeral homes in the United States post pricing online. Further, funeral homes have little incentive to offer less expensive, emerging, or green technologies that may lower consumer cost: despite the fact that more than half of consumers are interested in green options, only 32 percent of National Funeral Director members offered green options in 2015 (up from 12 percent in 2011).

A tax incentive to support and bolster the green burial industry has the added purpose of addressing both market failures and market barriers. An example of a market failure is the disconnect between the consumer and the product—specifically, consumers do not seem overly motivated to expend capital on a product from which they will never extract any lifetime value or enjoy-

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193 In New York City, a direct cremation (without casket, viewing or ceremony) may run as little as $550 and as much as $10,125. Grant, supra note 25.

194 Id.

What those families rarely realize is that their local funeral home, once run as a “mom-and-pop” family business, is now probably owned by a Wall Street firm. Service Corporation International, or SCI, for example, operates 1,477 funeral service locations and 483 cemeteries across the country, and is worth $13.3 billion. SCI charges between 40 percent and 75 percent more for its services than independent funeral homes do.


195 Ann Carns, Funeral Prices Are Hard to Get and Vary Widely, Survey Finds, N.Y. TIMES (Oct. 21, 2015), https://nyti.ms/1KoFdtg [https://perma.cc/92S4-XKK7]. “ ‘I don’t think money should be at the forefront of a funeral,’ Joseph Giordano Jr. of Curry & Giordano Funeral Home in Peekskill, NY, told The Post before adding: ‘I don’t include my prices on my website because I want people to come in and see my facility.’ ” Fickenscher, supra note 189.

196 Fickenscher, supra note 189. Technology such as the Funeralocity—collecting pricing data on 14,000 of 19,000 funeral homes as of November 2019—will facilitate online shopping and price comparison in an industry that is traditionally price opaque. Aldo Svaldi, Pricing Flights and Cars Online Is Common, Are Funerals Next? Founder of Funeralocity Thinks So, DENVER POST (Nov. 22, 2019, 10:48 AM), https://www.denverpost.com/2019/11/22/pricing-flights-cars-funerals-funeralocity [https://perma.cc/8MPG-L2UV].
Market barriers include the aberrational and cost insensitive behavior of the grieving consumer and structural limits upon information. Laws preventing the development of green burial technology also impede investment in this sector.\textsuperscript{198}

Perhaps the most impactful—but rarely discussed—market failure involves consumer inaccessibility to pre-death burial planning and trustworthy financial products that facilitate prepayment of funeral expenses. The law, historically, has normatively discouraged pre-need burial planning through outright prohibition: the “no property in a dead body rule” (or nullius in bonus rule) of English common law held that because the decedent did not have a property interest in his or her remains, one could not dispose of one’s own human remains by will.\textsuperscript{199} Modern law is deferential to the expressed intent of the decedent, and burial instructions clearly set forth in a testamentary instrument are generally honored and enforced.\textsuperscript{200} And though a substantial majority of respondents (62.5 percent) in a 2017 study felt that death care preplanning was important, less than 22 percent\textsuperscript{201} of consumers had communicated their wishes to others.\textsuperscript{202}

Obstacles to preplanning include other priorities and costly, inflexible financing options. Pre-need prepayment issues differ based upon whether a consumer wishes to pay for funeral versus burial.\textsuperscript{203} As concerns the latter, cemeteries regularly sell internment rights in advance of need, with payment being made in full and the rights to a grave being transferred immediately.\textsuperscript{204} By way of contrast, while a number of at-need funeral financing options exist,\textsuperscript{205} the de-

\textsuperscript{197} “Changing how individuals impact the environment through their daily behaviors, however, requires a reorientation of environmental law and policy and a balancing of government prerogatives with individual liberty.” Katrina Fischer Kuh, When Government Intrudes: Regulating Individual Behaviors That Harm the Environment, 61 DUKE L.J. 1111, 1112 (2012).


\textsuperscript{201} NFDA Consumer Survey: Funeral Planning Not a Priority for Americans, supra note 16.

\textsuperscript{202} Id. Data shows that pre-need planning is usually purchased by individuals over the age of 65—-with an average of seven years passing between purchase of the plan and date of death—and is paid for with installments. Complaint for Injunctive Relief, Restitution, and Other Equitable Remedies, supra note 26, at 8; Jennifer Huffman, State Alleges Millions of Dollars Mismanaged in Funeral Trust, NAPA VALLEY REG. (Apr. 23, 2011), https://mapavalleyregister.com/news/local/state-alleges-millions-of-dollars-mismanaged-in-funeral-trust/article_ba86d176-6e0d-11e0-9a47-001cc4e002e0.html [https://perma.cc/YHP2-SB5L].

\textsuperscript{203} TANYA MARSH, THE LAW OF HUMAN REMAINS 75 (2016). The at-need consumer is one who is making arrangements because a death has occurred. Id.

\textsuperscript{204} Id.

\textsuperscript{205} See id.
ficiency of funeral pre-need funeral financing options is staggering and will be
treated separately (and in great depth) in a forthcoming article.206

It nonetheless bears mentioning that neither of the two main options207 for
pre-need funeral financing—pre-need trusts and pre-need insurance policies—
is ideal.208 If a consumer wants to pay for arrangements on a pre-need basis,
most states require that the consumer place most of the prepaid funds into a
trust account.209 This use of pre-need trusts has not been without substantial
controversy. A number of state funeral home associations have established
preneed trusts as a pooled income fund: almost 500 funeral homes and 10,500
investors had preneed contracts tied to the Wisconsin Funeral Director’s
Preneed Trust and a $21 million shortfall occurred;210 in 2006, the Illinois Fu-
neral Director’s Preneed trust ran a $40 million shortfall;211 in 2011, the Cali-
ifornia Master Trust (created in 1985, with more than 27,000 investors and in
excess of $63 million under management) was sued by then-Attorney General
Kamala Harris—who estimated that $14 million needed to be repaid to the trust
for charging excessive administrative fees and paying illegal kickbacks to fu-
neral homes.212 The use of insurance policies to fund pre-need contracts is also
without disadvantages: two states (New York and Alaska) prohibit the funding
of pre-need contracts through life insurance;213 many plans have a minimum
age of forty to apply; benefits may not be portable to a different funeral home

206 The many disadvantages of pre-need financial instruments are touted in popular media
and use is discouraged. See, e.g., Should You Prepay for Your Funeral? Safer Ways to Plan
Ahead, FUNERAL CONSUMERS ALL., https://funerals.org/?consumers=should-you-prepay-for-
your-funeral [https://perma.cc/Q27J-UTB5]; Leanne Potts, Smart Ways to Cover the Costs of
a Funeral, AARP (July 7, 2020), https://www.aarp.org/home-family/friends-family/info-
2017/funeral-payment-options-fd.html [https://perma.cc/DV5P-5QE3]; Anthony Martin, 11
Reasons to Avoid Prepaid Funeral Plans & What to Do Instead, CHOICE MUT.,
https://choicemutual.com/prepaid-funeral-plans [https://perma.cc/G8WV-3HQV]; Selena
Maranjian, Think Twice About “Pre-Need” Funeral Insurance, MOTLEY FOOL (Nov. 19,
2014, 8:00 AM), https://www.fool.com/investing/general/2014/11/19/think-twice-about-pre-
need-funeral-insurance.aspx [https://perma.cc/Z7D6-S2YC].

207 See MARSH, supra note 203.

208 Funeral home owners need to rethink on a large scale the best way to handle
preneed . . . “It’s not to say that trust is bad or insurance is good . . . that’s not the
point.” . . . “We just have to realize that if we are going to make a commitment to be in the
financial services business, which is what we are doing, then we have to be prepared to run this
money as if we are a bona fide professional financial services company.”

$21M Preneed Shortfall Leads to Takeover of Wisconsin Association, FUNERAL SERV.
INSIDER 7 (Sept. 24, 2012), http://www.fsawisconsin.org/Resources/Documents/Funeral%20
Service%20Insi%20-%20Wisconsin%20Funeral%20Trust.pdf [https://perma.cc/5TY9-27
209 See MARSH, supra note 203. The at-need consumer is one who is making arrangements
because a death has occurred. Id.
210 $21M Preneed Shortfall Leads to Takeover of Wisconsin Association, supra note 208.
211 Id.
212 Complaint for Injunctive Relief, Restitution, and Other Equitable Remedies, supra note
26, at 8 n.4, 23, 35, 37.
213 See MARSH, supra note 203, at 76.
and/or different state; there may be a significant waiting period before benefits are available; and benefits may be impacted if the funeral home goes out of business.\textsuperscript{214} Further, enforcement of any pre-need contract is complicated due to the underlying privity issue: courts are divided as to whether or not these contracts may be enforced after death on behalf of the executor.\textsuperscript{215}

And while religion is often raised as a market barrier to green burial, it is because there is an inaccurate stereotype that green burial attracts the eco-chic, environmentally conscious, well-educated, unchurched consumer.\textsuperscript{216} The reality is that 12 percent of green burial cemeteries are Catholic,\textsuperscript{217} and it may be fair to characterize Jews and Muslims as the original green burialists.\textsuperscript{218} Muslims have practiced natural burial for more than 1,400 years, and in accordance with Islamic law, prefer to be buried within twenty-four hours without a casket, in a plain white shroud.\textsuperscript{219} For those of the Jewish faith, a wholly biodegradable wooden casket (sometimes with holes drilled in the bottom to hasten decomposition) must be placed directly in contact with the earth.\textsuperscript{220} Both Jewish and

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\textsuperscript{214} See Anthony Martin, 12 Best Burial and Final Expense Insurance Companies in 2020, CHOICE MUT. (Sept. 26, 2020), https://choicemutual.com/best-burial-insurance-companies [https://perma.cc/ATT3-XF7M] (identifying the portability that “pre-need policy[ies] at a funeral home . . . could be a big issue” if the insured moves away from that funeral home and the expediency of options other than preneed insurance contracts); Maranjian, supra note 206 (noting that the New York State Funeral Directors Association identified the volatility of the benefits for preneed funeral insurance); Should You Prepay for Your Funeral? Safer Ways to Plan Ahead, supra note 206 (“In most cases, you will spend as much or more in premiums than the policy will actually pay out at the time of your death.”).  

\textsuperscript{215} SeeMarsh, supra note 203, at 76 (“Generally, an action for breach of contract may only be brought by a party to the contract. Typically, the only two parties to pre-need contract are the funeral home and the decedent. Courts are divided on the question of whether or not a pre-need funeral contract can be enforced by the executor . . . .”).  


\textsuperscript{217} Ann Hoffner, Why Are 12% of Green Burial Cemeteries Catholic?, GREEN BURIAL NATURALLY (Feb. 7, 2017), https://www.greenburialnaturally.org/blog/2017/2/6/why-are-there-so-many-catholic-green-burial-cemeteries [https://perma.cc/FP2H-MFUG] (“Catholic dioceses across the country are embracing the new movement toward green burial which not only eschews toxic embalming, burial vaults and painted steel caskets but considers the land and the landscape of the cemetery itself and the possibilities for human burial to add value them.”).  

\textsuperscript{218} See id. (“Jewish burial is often referred to as approximating green burial; embalming is not generally used, burial is in a plain wooden box that may have holes drilled to speed decomposition through contact with the earth, . . . [A] few Jewish cemeteries have opened dedicated natural burial sections . . . .”); see also Forest Home Cemetery’s Green Burial Site Is a Traditional Muslim-Style Interment, WIS. MUSLIM J. (July 20, 2018), https://wisconsinmuslimjournal.org/forest-home-cemeterys-green-burial-site-is-a-traditional-muslim-style-interment [https://perma.cc/A9UY-9STU].  

\textsuperscript{219} Forest Home Cemetery’s Green Burial Site Is a Traditional Muslim-Style Interment, supra note 218.  

Christian religions treat as sacred the text of Genesis 3:19 in the Bible that states “for dust thou art, and unto dust shalt thou return”—meaning, in effect, that one must return to the earth after death. The Vatican released instructions in October 2016 noting that green burial (but not aquamation) for the ecocatholic is fully appropriate and in keeping with “authentic Christian practice.” For Christians, generally, green burial comports with the belief that Jesus was humble and would have likely rejected the grandeur of many American funerals.

When dealing with market failures and market barriers, the government may take a number of different approaches: tax incentives, grants, rebates, or credit enhancements. Part IV of this Article explores the myriad of reasons that tax incentives are an appropriate solution for investment in green death care technologies.

IV. TOWARDS SOLUTIONS

There are a number of different approaches that the government may take to invest in the green death care industry. Coarse economic measures—such as tax incentives—may not be the ideal way to deliver a government subsidy to a nascent market—and, in fact, probably would not make the top-ten list of approaches by which a government subsidy should be delivered. And yet, these suboptimal spending mechanisms have long been used to shape change and drive environmental protection. The unfortunate reality is that our current climate of political partisanship creates stalemate and paralysis, and a discussion about government subsidy into the green burial space is likely to be purely academic unless a tax expenditure is used. This Article suggests that a Pigouvian tax subsidy may be appropriate to incentivize green burial, and Part IV outlines important features of a tax expenditure to facilitate support and innovation of an important industry that may potentially touch upon every taxpayer’s life (or death).

A. Use of Tax Expenditures, Generally

Tax expenditures are (fairly) criticized for their use in policy implementation for being crude, opaque, and context-oblivious. They are a form of

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21 Hoffner, supra note 217; Genesis 3:19 (King James).
22 Id.
23 Markoe, supra note 216.
26 “Professor Stanley Surrey was the first to note this functional equivalency between certain tax provisions and direct governmental spending; he coined the term ‘tax expenditures’ to refer to such provisions.” Jonathan P. Schneller, The Earned Income Tax Credit and the Administration of Tax Expenditures, 90 N.C.L. Rev. 719, 722 (2012).
government spending that arguably produce exactly the same economic consequences as direct spending programs. And yet, tax expenditures are resilient and politically popular, likely because they are uniquely situated in their ability to circumvent the Senate filibuster by being passed in reconciliation legislation, which makes them one of the few tools that may be wielded to shape policy in a partisan climate. And though there have been attempts to curb the use of tax expenditures, most notably through the tax expenditure budget, it seems as though the Joint Committee on Taxation has even declared defeat in its efforts to reduce reliance on this form of indirect spending.

There are easy arguments to be made both for and against the use of tax expenditures to facilitate government spending. It is arguably inappropriate to use tax incentives to achieve a non-revenue policy objective and as the primary means of driving social policy (i.e., the implementation of environmentally friendly, sustainable innovation and practices). Further, tax expenditures are often used as surreptitious spending measures, allowing politicians to spend large amounts of money without drawing the attention of direct spending programs. This lack of transparency at best obfuscates and at worst deceives—


229 Schneller, supra note 226, at 721–22 (noting that Justice Kagan explained this idea in the dissent in Arizona Christian School Tuition Org. v. Winn, 131 S. Ct. 1436 (2011)).

230 Congress’s use of tax expenditures has accelerated over the years. In 1972, for example, the JCT Staff’s first description of tax expenditures totaled some 60 items. Our 2007 pamphlet, by contrast, while employing essentially the same methodology as that of our first description 35 years earlier, listed 170 tax expenditures.

231 David Roberts, Congressional Democrats’ Last, Long-Shot Attempt at Climate Progress This Year, Vox (Dec. 12, 2019, 3:30 PM), https://www.vox.com/energy-and-environment/2019/12/12/21010552 [https://perma.cc/GS6V-5Z42].


233 “Unfortunately, dragging tax expenditures into budgetary daylight has eliminated neither policymakers’ opportunities nor incentives to exploit the fiscal advantage they provide.” Id. at 283.

234 Schneller, supra note 226, at 723–24.

235 Dean, supra note 232, at 274–75.
shielding indirect spending from budgetary daylight and public scrutiny. Further, direct spending should be favored over use of tax expenditures because deadweight loss in the tax system (or economic waste) rises exponentially when there is increased reliance upon the latter.

On the other hand, there are a number of compelling arguments in favor of tax incentives as a general proposition. Tax expenditures may sometimes be used to subtly shift behaviors: public perception of a tax credit or deduction has an unquantifiable but tacit impact upon behavior. To the extent that every tax expenditure is an act of social engineering, the Internal Revenue Code serves a powerful telegraphing function—and is perhaps one of the most effective tools in the hands of the legislators by which the attention of the taxpayer (and their professional advisors) can be captured and important information may be delivered. This is particularly important when trying to promote positive innovative change to those consumers/voters/taxpayers who embrace change only when they do not find themselves inconvenienced or burdened, or in those instances when an initiative does not receive bipartisan support. One scholar refers to tax expenditures as fiscal superconductors, and “[j]ust as superconductivity allows electrical currents to flow without resistance, substituting tax expenditures for direct expenditures allows policymakers to neutralize impediments to spending.” The voting public may object to dollars being spent for a specific purpose, but is far less likely to be aware of the existence of a tax expenditure that offers the targeted group the same benefit as direct spending. The benefit of a tax expenditure rests in its ability to “nudge” taxpayers towards a certain behavior, while also obscuring that the government is spending money on the subsidy.

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237 Id.
239 “[I]t is always the case that changes in tax policy have the intended or unintended effect of changing society, that is, of being at least inadvertent acts of social engineering.” Neil H. Buchanan, The Case Against Income Averaging, 25 VA. TAX REV. 1151, 1162 (2006) (emphasis omitted).
240 “[O]ur tax laws have an important expressive function and convey distinct messages about who we are as Americans—that is, about what and whom we value and the type of society we aspire to be.” ANTHONY C. INFANTI, OUR SELFISH TAX LAWS: TOWARD TAX REFORM THAT MIRRORS OUR BETTER SELVES 132 (2018).
241 Dean, supra note 232, at 284.
B. Tax Expenditures and the Environment

Green policy (and the climate crisis, generally) does not receive bipartisan support needed to craft regulations and targeted investment, and tax incentives are a useful way in which to broadly communicate information to taxpayers—and so it naturally follows that use of tax incentives may serve to broaden public access to and interest in disruptive innovation. This is not an outlandish idea: tax incentives have dominated green energy policy for some time, as a way of subsidizing development of alternate, inexpensive, sustainable energy sources.

There is a broad array of recent federal energy/environmental tax expenditures that include the following: a $300 tax credit for purchase of a biomass stove or appliance that is at least 75 percent efficient before December 31, 2020; a credit for 26 percent of the cost of renewable home energy systems (solar water heating system, solar electric, geothermal heat pumps), with no upward limit, for any home (not just a personal residence) through December 31, 2020; tax credits ranging from $2,500 to $7,500 for all-electric vehicles; and, until the end of 2017, an array of federal tax credits were available for energy efficient improvement of principal residences, including duct sealing and qualifying insulation, doors, windows, skylights, and roofs. Damage to the environment is a national problem that deserves to be the focus of national attention. Changing destructive consumer behaviors in favor of environmentally friendly ones first requires education, and then requires changing of ingrained consumer habits. Environmental tax credits have been proven to be extremely cost-effective incentives that often leverage substantial private sector investment as part of obtaining the benefits of the credit.

244 See Roberts, supra note 231.
245 Mona Hymel, The United States’ Experience with Energy-Based Tax Incentives: The Evidence Supporting Tax Incentives for Renewable Energy, 38 Loy. Univ. Chi. L.J. 43, 45 (2006) (“Studies evaluating the effectiveness of tax incentives in stimulating the alternative fuel technology industry confirm that such incentives, or equivalent measures, are necessary to the industry’s development.”).
248 Id.
A structural failing of the tax expenditure is the ever-lurking possibility that the incentive has simply rewarded those taxpayers who would have incurred an expense anyway—without regard to the tax expenditure itself. With regard to preplanning and prepayment of death care expenses earmarked for green burial, this is not a concern: the financial products needed to facilitate prepayment of funeral expenses through reliable and broadly used financial products do not yet exist. This is a marketplace in serious need of development, given that an estimated 40 percent of Americans would have difficulty managing an unexpected $400 expense,\(^{251}\) and the most efficient and obvious way in which to ameliorate the unexpected financial burden imposed by funeral poverty is to render it expected.

The tax credit proposal set forth in Part IV takes its cue from the tax credit that fueled the boom in the nascent solar energy industry:\(^{252}\) the legislation in 2007 that allowed taxpayers to take a credit of 30 percent of the cost of purchasing and installing solar panels against taxpayers’ income.\(^ {253}\) In fact, the CEO of the Solar Energy Industry Association claims that evidence of the subsidy’s success is the 10,000 percent increase in solar capacity, almost 250,000 new jobs, and $140 billion in investment since the enactment of the incentive.\(^ {254}\) The solar industry demonstrates the efficacy of using tax incentives to attract capital investment in new or undeveloped areas of a market.\(^ {255}\) Further, tax credits for sustainable energy receive broad support from voters—with anywhere from 60 percent\(^ {256}\) to 89 percent\(^ {257}\) of those surveyed supporting environmentally-friendly energy initiatives.


\(^{252}\) “[I]n 2007 there were only 8,775 megawatts of solar energy on the US grid—less than one-tenth of 1 percent of America’s electricity supply. But Congress had just passed a bill that gave Sun-run a chance: It allowed businesses and individuals to deduct 30 percent of the cost of installing new solar panels from their taxes. The tax credit became essential to helping the company attract investors. . . .”


\(^{254}\) Oberhaus, supra note 252.


And while some economists insist that such green tax credits are a terrible idea, this is based upon two main objections: the distributional inequity of the benefits flowing from the credit, and the little impact that the incentive has upon reduction of greenhouse gas emissions.\footnote{Lyman Stone, \textit{Green Tax Incentives Just Don’t Work}, TAX FOUND. (June 25, 2013), https://taxfoundation.org/green-tax-incentives-just-dont-work [https://perma.cc/RLQ5-NZQJ].} New markets often see higher income taxpayers driving demand, at least initially, until there are pricing corrections\footnote{See David Roberts, \textit{Clean Energy Tax Credits Mostly Go to the Affluent. Is There a Better Way?}, Vox (Nov. 24, 2015, 1:20 PM), https://www.vox.com/2015/11/24/9792474/energy-tax-credits-inequitabe [https://perma.cc/HKQ8-7M2J].}—\footnote{Id.} and so distributional inequity is a real concern but may be addressed in part through the refundability of the tax credit proposed in Section IV.C. The concern that a green death care tax credit will not directly reduce greenhouse emissions is reductionist—not every green tax incentive is (or should be) wholly about cost-effectively and directly reducing carbon emissions.\footnote{A credit can be used as a behavioral “nudge,” applying nudge theory. Andy Lymer, \textit{Nudging Taxpayer Behaviour}, TAX ADVISER (Apr. 1, 2018), https://www.taxadvisermagazine.com/article/nudging-taxpayer-behaviour [https://perma.cc/J8JC-D3HB]; see also William English, \textit{Two Cheers for Nudging}, 14 GEO. J. L. \\& PUB. POL’Y 829, 829–31 (2016).} Tax expenditures necessarily implicate the law of unintended ancillary consequences, and those unintended or ancillary consequences can be difficult to measure: the number of consumers for whom the tax credit operated as a nudge to change behavior;\footnote{First you will come to the Sirens who enchant all who come near them. If any one unwarily draws in too close and hears the singing of the Sirens, his wife and children will never welcome him home again, for they sit in a green field and warble him to death with the sweetness of their song. There is a great heap of dead men’s bones lying all around, with the flesh still rotting off them. Therefore pass these Sirens by, and stop your men’s ears with wax that none of them may hear; but if you like you can listen yourself, for you may get the men to bind you as you stand upright on a cross-piece half way up the mast, and they must lash the rope’s ends to the mast itself, that you may have the pleasure of listening. If you beg and pray the men to unloose you, then they must bind you faster. \textit{Homer, The Odyssey}, scroll xii l. 37 (Samuel Butler trans.), https://cyber.harvard.edu/home/r/odyssey.html [https://perma.cc/2EA9-EG2D].} the impact of increased consumer awareness of new options, spurring industry growth; and, the siren song\footnote{NFDA Consumer Survey: Funeral Planning Not a Priority for Americans, supra note 16.} of consumer attention (or the promise of consumer attention) as a way in which to attract investment capital necessary to fund disruptive and innovative technologies.

A compelling argument can be made that the green death care industry is an area ripe for capital investment: more than half (53.8 percent) of consumers expressed an interest in green options.\footnote{Id.} Almost two-thirds of surveyed consumers felt that it was important to pre-plan their own funeral, but only 21.4 percent of consumers had done so.\footnote{Id.} Modern traditional funeral and death approaches are not economically or environmentally sustainable; preservation

\begin{thebibliography}{9}
\footnotesize
\bibitem{Id} Id.
\bibitem{Homer} First you will come to the Sirens who enchant all who come near them. If any one unwarily draws in too close and hears the singing of the Sirens, his wife and children will never welcome him home again, for they sit in a green field and warble him to death with the sweetness of their song. There is a great heap of dead men’s bones lying all around, with the flesh still rotting off them. Therefore pass these Sirens by, and stop your men’s ears with wax that none of them may hear; but if you like you can listen yourself, for you may get the men to bind you as you stand upright on a cross-piece half way up the mast, and they must lash the rope’s ends to the mast itself, that you may have the pleasure of listening. If you beg and pray the men to unloose you, then they must bind you faster. \textit{Homer, The Odyssey}, scroll xii l. 37 (Samuel Butler trans.), https://cyber.harvard.edu/home/r/odyssey.html [https://perma.cc/2EA9-EG2D].
\bibitem{NFDA} NFDA Consumer Survey: Funeral Planning Not a Priority for Americans, supra note 16.
\end{thebibliography}
chemicals are pollutants, raw materials are wasted, cemeteries are basically golf courses for the dead. In a sense, a tax subsidy for green death technology operates as a Pigouvian subsidy—or a subsidy that is meant to be “corrective” in providing an incentive to encourage an activity with positive social externalities (which, in this case, steers taxpayers away from the activity with negative social externalities). Although the use of both Pigouvian taxes and subsidies has been subject to scholarly criticism, at least one scholar asserts that such taxes or subsidies are fairly used when harm or benefit does not vary based upon source (e.g., harm from global environmental pollution).

And while there is no question that some of the benefit of this subsidy will be inframarginal (and benefit those who would have opted for green disposition anyway), the inefficiency of an inframarginal subsidy must be taken in balance against the fact that broad success of this tax credit will implicitly mean that the availability of prepayment financial instruments has broadened. It is also likely that information constraint within the industry has been reduced to some degree.

C. The Green Burial Tax Credit

The practical reality is that tax expenditures are the most efficient (and perhaps the only possible) path towards subsidy in a fractured, politically polarized government, and such green tax credits remain popular with a majority of voters. Tax incentives have been used to encourage a reduced reliance on fossil fuels, increased use of sustainable energy sources, or to generally increase participation in environmentally sustainable practices.

265 A hill that the author will die on. #punintended.
267 “Lily Batchelder, Fred Goldberg, and Peter Orszag argue that when policymakers want to use a tax instrument to encourage activities with positive social externalities, the tax instrument should typically take the form of a uniform refundable tax credit.” Victor Fleischer, Curb Your Enthusiasm for Pigovian Taxes, 68 VAND. L. REV. 1673, 1688 (2015).
268 Id. at 1691–92.
269 Id. at 1709.
270 Gary M. Lucas, Jr., Voter Psychology and the Carbon Tax, 90 TEMPLE L. REV. 1, 12 (2017) (“[M]ost Americans believe that global warming is real, that humans are at least partly responsible for it, and that the government should adopt policies to address it.”).
271 While opinion polls show that people generally rate protecting the environment as among their highest priorities, many individuals continue to behave in environmentally-destructive ways. A former EPA Administrator once remarked, “we like to drive big power cars, use a lot of electricity, generate a lot of waste, enjoy cheap food, live in grassy suburbs, and collectively send pollution in massive amounts to often distant waterways and airsheds.” The majority of the population behaves in such ways—by driving cars, fertilizing and mowing yards, pouring household chemicals on the ground and down the drain. Each behavior might only contribute minute amounts of pollutants, but in the aggregate across millions of individuals, it results in a stunning amount of pollution.
Leagre, supra note 249, at 800–01 (footnotes omitted).
offers a broad sketch of the type of tax expenditure that would support the green burial industry, stir consumer interest, and generate financial products to support increased investment in this space: a refundable tax credit for expenses related to the nonrefundable prepayment of expenses arising from “sustainable disposition or transition of human remains.”

Distributional equity is an important consideration that drives the refundability of this proposed tax credit—because regardless of income, everybody dies. The difference between a refundable and non-refundable tax credit is quite simple: the former is a credit that allows the taxpayer to receive a tax refund when the credit exceeds the taxpayer’s tax liability, and the latter does not. Credits only operate as an incentive when a taxpayer owes tax against which to offset the credit, and the refundability of this credit will subsidize the costs of advance planning for those with low incomes—those for whom advance burial planning may be most important, and for whom the subsidy of the credit may be indispensable. Crafting tax credits that may be utilized by lower-income households is essential, given that the use of non-refundable energy credits has regressive distributional consequences and disproportionately benefits higher income households. It is important that green death technologies not be accessible only to the white and wealthy, and a non-refundable credit would afford no benefit to more than forty million households.

For purposes of the proposed tax credit, “sustainable disposition or transition of human remains” shall be defined as any burial or disposal process that meets all of the following qualifications:

1. Does not involve the use of embalming fluid and similar chemicals used for preservation;
2. If burial is involved,
   a. the burial site may not be maintained by the use of fertilizers, pesticides or herbicides;
   b. the burial site must preserve or restore natural habitat;

272 “While tax expenditures come in the form of exemptions, credits, and deductions, the latter are particularly inequitable in their conferral of a higher subsidy or benefit upon the taxpayers in the highest tax brackets . . . .” Victoria J. Haneman, A Timely Proposal to Eliminate the Student Loan Interest Deduction, 14 NEV. L.J. 156, 170 (2013).
274 “California households with more than $100,000 in annual income have participated in energy efficiency programs at twice the rate of households earning less than $50,000, according to analysis of the U.S. Energy Information Administration’s Residential Energy Consumption Survey.” Andrew G. Campbell, Bringing Fairness to Energy Programs, ENERGY INST. BLOG (July 5, 2017), https://energyathaas.wordpress.com/2017/07/05/bringing-fairness-to-energy-programs [https://perma.cc/ZL8J-WWJA].
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3. Cremation only if accomplished through a process that produces no toxic emissions and is not accomplished through the use of fire (such as aquamation, alkaline hydrolysis, or liquid cremation).

4. Any decomposition process or technology that biodegrades remains within a twelve-month period of time.

The tax credit amount may be adjusted based upon the amount of subsidy the government wishes to make available. For the sake of discussion, modeling many energy tax credits but taking a cost-sharing approach, 30 percent of the cost of lifetime burial planning would be made available as a refundable credit—with a lifetime cap per taxpayer of $600 (or $2,000 in burial expenses). This lifetime cap may be adjusted as data is collected with regard to average costs of green burial.276

The table set forth below illustrates the way in which such a credit would operate, assuming a flat, monthly contribution by a taxpayer over a five-year term and a $600 proposed cap. These calculations exclude interest that may be accrued and also any management fees that may be imposed.

276 No reliable data has been gathered on the number of green burials in the United States and attendant costs; it is estimated that the average green burial costs (including burial plot, internment, shroud, and/or environmentally friendly casket) range from $1,000 to $4,000. Robert Schroeder, Why More Americans Are Considering ‘Green’ Funerals, MARKETWATCH (Dec. 26, 2015, 10:55 AM), https://www.marketwatch.com/story/why-more-americans-are-considering-green-funerals-2015-10-29 [https://perma.cc/B3ZF-9Y59]; Guide to Green Burial – A Natural Approach to Funerals, LINCOLN HERITAGE LIFE INS. CO., https://www.lhlic.com/consumer-resources/green-burial [https://perma.cc/AE62-GPCC].
TABLE 1

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The way in which unconsidered expenses create burdens that perpetuate cycles of intergenerational poverty is outside of the scope of this Article, but does bear upon this tax credit proposal. It has become a societal norm in the United States for families dealing with unexpected deaths to turn to crowdfunding campaigns to assist with funeral and burial expenses, with the Chief Executive Officer of GoFundMe stating that his staff coaches funeral organizers on ways to stage fundraising campaigns to help them go viral. There is valid cause for concern that crowdfunding is the new funeral insurance, with families lulled into believing that burial costs will easily be met by friends and family through crowdfunding campaigns. This is particularly troubling given the structural inequity that it highlights: crowdfunding campaigns are proven to be more lucrative when the subject of the campaign is young, white, and attractive.

Although this important discussion about funeral poverty will be deeply considered in a subsequent Article, it is worth mentioning that a tax credit in the death care industry will advance the importance of saving for an inevitable family expense, while also being structured in such a way that affordable, envi-

277 But if I were a crooked funeral director, I would see directing customers to these new fundraising opportunities as an alternative to letting them glimpse the last page in my "menu of services" marked in fancy cursive “For the Bereaved of Humble Means.” Why show a customer the cheaper option if I can direct them to a source of money instead? Mike Pearl, People Are Now Crowdfunding Their Funerals Online, VICE (Sept. 19, 2013, 5:30 AM), https://www.vice.com/sv/article/9bz5wa/people-are-now-crowdfunding-their-funerals-online [https://perma.cc/6HUW-C45N].

278 Laura M. Holson, As Funeral Crowdfunding Grows, So Do the Risks, N.Y. TIMES (June 5, 2018), https://nyti.ms/2xKHupx [https://perma.cc/7K3D-L72Z].

279 See id.

280 Id.

281 “It would cost about $10,000 to bury your dead ass right now. I’m talking to you, 18- to 35-year-olds. . . . If you die penniless, your family could and should consider going the crowdfunding route on Giveforward, Donatjonto, or Graceful Goodbye.” Pearl, supra note 277.

282 “Those who are most marginal in society are the least likely to attract sufficient compassion and are therefore likely to have failed crowdfunding campaigns.” Tamara Kneese, Mourning the Commons: Circulating Affect in Crowdfunded Funeral Campaigns, SOC. MEDIA + SOC’Y., Jan.–Mar. 2018, at 1, 9.
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Bereavement and Grief are also advanced. Although industry regulation is unquestionably an effective way in which to protect the vulnerable consumer, so too is creating paths by which the vulnerable consumer becomes less vulnerable: information and pre-need prepayment options.

CONCLUSION

Bereavement, or loss of a loved other, is one of life’s most stressful events. After a major loss, such as the death of a spouse or child, a third of survivors will suffer detrimental physical or mental health issues. One-quarter of surviving spouses will suffer clinical depression or anxiety within the first year of loss. Grief is frequently accompanied by weight loss, anxiety, despair, hypnagogic hallucinations, temporarily impaired immune response, disorganization, and/or disorientation. And yet, the vast majority of Americans adopt the messy, expensive approach of ignoring death until it happens—shuffling the consequences of failure to pre-plan one of life’s most expensive expenditures onto grieving loved ones.

Death will soon be trending upward with the gradual demise of the aging Baby Boomer generation, and mortality rates are predicted to increase by more than one-third over the next two decades. Contemporary death care industry practices impact and shape consumer choices that are problematic and increasingly relevant, and this Article proposes the use of a green tax credit as both an informational device and a multi-purposed behavioral nudge. The implicit market barrier of information constraint is easily overcome by an income tax system that is powerful in its ability to reach consumers. With regard to the latter, a tax incentive for pre-need planning and prepayment is likely to generate con-

285 Parkes, supra note 284, at 856.
286 Id. at 857.
287 It is estimated that 40 percent of Americans would have difficulty paying for an unexpected $400 expense. BD. OF GOVERNORS, FED. RSRV. SYS., supra note 251, at 21.
288 GoFundMe, one of the largest fund-raising sites, says that 13 percent of its campaigns created in 2017 were described as memorials, which include funerals and are one of the company’s fastest growing categories. That follows on a 2015 study by the Funeral and Memorial Information Council, which reported that 17 percent of adults aged 20 to 39 had used the internet to solicit or donate money for funeral-related arrangements. Holson, supra note 278.
289 Leland, supra note 19.
sumer interest and investment into the creation of more accessible financial products to facilitate prepayment. The American emphasis upon life over death leaves the consumer extraordinarily disconnected from death in ways that will inevitably be economically impactful and the proposed green tax credit is one potential tool of reconnection.

290 Christine Colby, Want to Plan for Your Death and Funeral? Here’s How, N.Y. TIMES (Feb. 20, 2018), https://nyti.ms/2CcvcYq [https://perma.cc/4WYF-TBHC] (“There are advantages for consumers who want to spend down their assets in order to qualify for Medicaid . . . . But for consumers who aren’t in this situation, there are benefits to prearrangement, but not clear advantages for purchasing pre-need plans.” (quoting Tanya Marsh, Professor of Funeral and Cemetery Law, Wake Forest University)).