Dear Li,

Thanks for sending us the first review. Please, find below our answers, and the related quotes that will appear in the revised draft. Please, don’t hesitate to contact us for further inquiries.

Best regards,

Nicolao Bonini (and co-authors)

1. **The rationale for the outline of the six nudges.**

   Thanks to the reviewer for pointing out this aspect. In the revised Introduction, we clarified this aspect. What follows was inserted in the revised Introduction:

   “Here we discuss six nudges that aim to promote pro-environmental choices and behaviors. The list is not exhaustive. However, in this critical review we aim to cover the entire decision process: from the initial intelligence gathering to the actual choice. For each aspect of the decision process a nudge can be applied. A nudge can be applied to the design of a distant communication where the citizen is first informed about the public good/action (e.g. information about the opportunity cost of a green action) or to the design of the actual choice context where the citizen is asked to make a decision (e.g. ambient smell and choice menu display). A second common aspect of the list is that all nudges relate on a psychological mechanism (fully described and commented), and not on an economic incentive, or a combination of both. Last, we reviewed papers that outlined, to our judgment, the most effective psychological mechanisms to induce pro-environmental decisions” (pp. 4-5 of the revised Introduction).

2. **Future directions.**

   Thanks to the reviewer for also pointing out this aspect. We addressed it by inserting a new section “Future directions.” Here is the relevant text we added:

   “Future directions

   Several of the reported studies involved laboratory experiments and examined judgments (e.g., stated willingness to contribute for a public good) rather than actual behavior (e.g., real monetary contributions). Therefore, it is unclear whether the results obtained extend to real-life situations. Thus, future research should test these interventions in the “wild,” such as through field experiments, and examine their real impact on pro-environmental behavior. Furthermore, for obvious theoretical reasons, most research has focused on a particular
intervention. Future research could address whether combining interventions (default plus economic incentive; referent points plus social norms) could further aid the promotion of pro-environmental behavior. Even if the combined effect of interventions is not additive, such research could shed light into the underlying processes. Finally, some of the interventions are not readily “actionable” (Teachman et al., 2015). For example, the finding that priming participants with pictures of nature (in a computer screen) increases correct recycling practices is hard to put into practice. Therefore, future research should turn these ideas into interventions that could actually be implemented (e.g., pictures of nature near collection areas) and examine their efficacy.”(pp. 23-24 of the revised submission).

3. Abstract
We also added the following abstract as per your request.

“Abstract
Our current lifestyle is not sustainable. One way to increase sustainability is by developing greener technologies. Another, complementary way, is by altering people’s attitudes, habits, and behaviors. Here we discuss six techniques that aim to gently push or nudge people towards more pro-environmental choices. These techniques range from ones that can be applied from a distance, e.g., techniques which could inform the construction of communication messages, to ones that involve changes in the context where the choice takes place. For each technique, we discuss its theorized cognitive and/or emotional underpinnings. Furthermore, we identify gaps in the literature and ways in which future research could fill these gaps.”

4. Brief author CV
Here are the brief author CVs:

Nicolao Bonini is full Professor of Psychology of Consumer Choice in the Department of Economics and Management, at the University of Trento, Italy. He holds a PhD in experimental psychology from the University of Trieste. He has undertaken psychological research using a range of methods, and has published widely on economic psychology and decision research. He has served the European Association of Decision Making as President, President-Elect, and a member of the steering board.

Constantinos Hadjichristidis is Associate Professor at University of Trento, Department of Economics and Management, and a member of the Centre for Decision Research, Leeds University Business School, University of Leeds. Dr. Hadjichristidis holds a Ph.D. in experimental psychology from Durham University.

Michele Graffeo is Associate Editor at Nature Climate Change of the Springer Nature publishing group. Dr. Graffeo won a Marie Sklodowska-Curie Felloship for a project studying how psychological mechanism can be applied to the creation of Nudge strategies for energy-saving. Dr. Graffeo holds a Ph.D. in cognitive sciences and education from the University of Trento, Italy.
Dear Li,

Thanks for sending us the second review. Please find below our answers and the related quotes that will appear in the second revised draft. Please, do not hesitate to contact us for further inquiries.

Best regards,

Nicolao Bonini (and co-authors)

1. **The rationale for the outline of the six nudges.**
   
   Thanks to the reviewer for pointing out this aspect. In the second revised Introduction, we further clarified this aspect. In the Introduction (last paragraph), what follows was inserted:
   
   “In the present review we discuss six nudges that aim to promote pro-environmental choices and behaviors. We do not present an exhaustive list, and do not offer a new theoretical foundation for the nudging approach. Rather, our aim is to discuss nudges that cover the entire decision process: from the initial intelligence gathering to the actual choice. For example, we discuss nudges that concern the design of a distant communication where the citizen is first informed about the public good/action (e.g. information about the opportunity cost of a green action) but also nudges that pertain to the design of the actual choice context where the citizen is asked to make a decision (e.g. ambient smell and choice menu display). Each nudge relates to a specific psychological mechanism, which we fully describe and comment. We review papers that, in our judgment, outline the most effective psychological mechanisms to induce pro-environmental decisions. By providing examples of nudges that cover many aspects of the decision process, the present review can be of relevance to practitioners such as marketers, policymakers and consumer representatives.”

2. **The foreign language strategy.**
   
   Thanks to the reviewer for also pointing out this aspect. In the revised manuscript we highlight that there is substantial evidence to support that the use of a foreign language can impact judgment and decision making. To this end, we now refer to two recent reviews on the subject, one by Hayakawa and colleagues (2017) in *Trends in Cognitive Sciences*, and another by Costa and colleagues (2017) in *Current Directions in Psychological Sciences*. Furthermore, we now also briefly discuss a study by Puntoni et al. (2009) which shows that the use of foreign language affects consumers’ response to advertising messages. Here the relevant text (we underline the relevant new text):

   “The third nudge that we will discuss concerns the language in which a message is communicated and, specifically, whether this is a person’s mother tongue or a foreign language (i.e., a language that the person knows well but mostly though formal instruction or education). Recent studies have shown that communicating information in a foreign versus a native language can impact moral judgments (see Costa et al., 2014; Geipel, Hadjichristidis, & Surian, 2015a, 2015b, 2016) and judgments of risk and benefit (see Hadjichristidis, Geipel, & Savadori, 2015). More pertinently to the present purposes, research has also shown that foreign language use can also influence consumers’ response to advertising messages (Puntoni, de Langhe, & van Osselaer, 2009). The main explanation is that the use of a foreign language reduces emotionality and thus leads to judgments that are less swayed by affective considerations (see Caldwell-Harris, 2015; Hadjichristidis, Geipel, & Surian, 2016;

Thanks to the reviewer for also pointing out this aspect. We think that this strategy can be applied only in very limited circumstances (e.g. when the government can impose such communication strategy, such as in the tobacco and alcohol domains). However, in many other instances this strategy cannot easily applied and in others it is outright banned. Consider, for example, the promotion of green bulb lamps. The EU commercial law forbids explicitly comparative and negative ads. So, one cannot design an ugly product package to lower the market share of non-ecologically friendly lamps. However, there might be several ways to make the product package of the green bulb lamps more attractive, and we discuss some of them in our review.