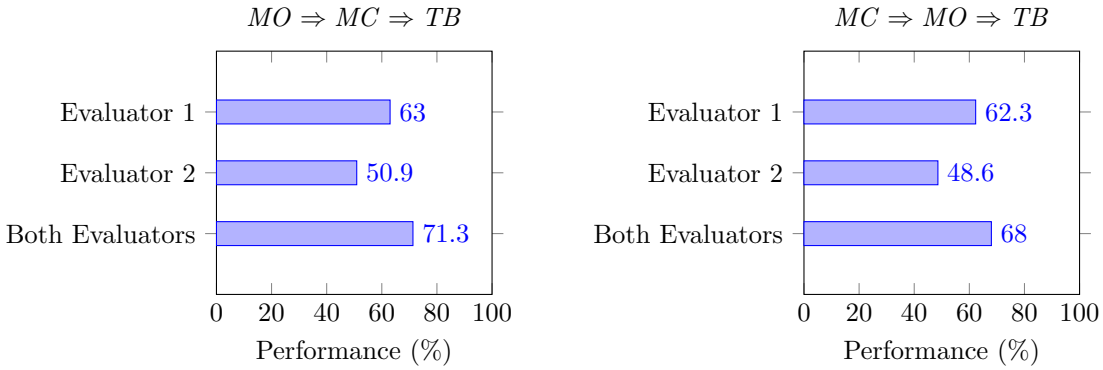
Appendix A. Extended Results

A.1 Full List of Values

Table A1 shows the original full list of values as reported by Kaptein (2020), together with the number of annotations. We retained only the values with at least 250 annotations to perform our experiments (see Section 3.1). Furthermore, we excluded Necessity, described as "Certain (technical) steps are seen as necessary for sustainable energy generation," as it is not a well-formulated value, and is not comparable with the other selected values.

A.2 Alternative Value Preferences Methods Sequence

We experimented with two alternative sequences of value estimation methods, namely $MO \Rightarrow MC \Rightarrow TB$ (Figure A1a) and $MC \Rightarrow MO \Rightarrow TB$ (Figure A1b). As the results with the former are consistently better than with the latter, we choose $MO \Rightarrow MC \Rightarrow TB$ as the R_{comb} that we report in the main paper.



(a) Results with the $MO \Rightarrow MC \Rightarrow TB$ sequence. (b) Results with the $MC \Rightarrow MO \Rightarrow TB$ sequence.

Figure A1: Comparison of alternative sequences of value preferences estimation methods.

Value	Description	# Annotations
(Anti) market segment	Used both positively and negatively. On the one hand, market forces are positive, but there is also strong commentary on market forces and their negative effects.	156
Ambition	Striving and being driven to be the most innovative, sustainable or largest solution, for example.	134
Cooperation	Working together on a goal. Residents can work together, but also groups and organizations.	307
Cost-effectiveness	Money must be well spent, and the project must be profitable. No waste. Costs should not be too high.	509
Equality	All people are equal and have equal rights. Renewable energy must be accessible to all.	113
Honesty (of distribution)	Lusts and burdens are distributed fairly among inhabitants. Possible returns are distributed fairly.	185
Knowledge	Availability and sharing knowledge about renewable energy.	153
Landscape	Nature and environment are important. Horizon pollution is often seen as negative. Preserving the Frisian landscape is central.	433
Leadership	Clarity and control over the sustainability of the energy system. Often it is about an organization (the municipality) that has to take charge.	458
Liveability	Liveability of the region is important. Often used in a negative sense: The quality of the living environment should not be affected by (nuisance of) projects carried out.	188
Local	Participants value local projects. This is about generating local energy, implementation as well as project locations can be local and take place in their own environment.	135
Necessity	Certain (technical) steps are seen as necessary for sustainable energy generation.	431
Participation	The opportunity for residents and stakeholders to give their opinion and to think and do along.	196
Responsibility	Sustainable energy generation as a task or obligation. Both organisations and individual inhabitants are expected to contribute to this (and even have a moral responsibility to make it more sustainable).	106
Self-determination	The opportunity for residents to make their own decision on renewable energy and to be able to implement it.	391
Support	Unburden, realize that you can/will be helped in the right way.	215
Technology	Innovation is important. Technological solutions and innovations are being dedicated to achieving the objectives.	211
Trust	The importance that organizations (governments, companies) are honest and you can count on them.	112

Table A1: List of all values in the energy transition PVE (in alphabetical order) with the number of annotations.

A.3 Hyperparameters Search

We experimented with the `pdelobelle/robbert-v2-dutch-base`[1] RobBERT model (Dutch). Then, we translated the corpus with the Microsoft Azure Text Translation service[2] and tested the `cardiffnlp/twitter-roberta-base-sentiment`[3] RoBERTa model (trained on a sentiment analysis task on tweets), and the `xlnet-base-cased`[4] XLNet model. To select the hyperparameters, we trained and evaluated each model on the entire PVE corpus with 10-fold cross-validation. Table A2 shows the hyperparameters that were compared in this setting, highlighting in bold the best performing option and reporting the micro and macro F_1-scores resulting in the best hyperparameters. If a parameter is not present in the tables, the default value supplied by the framework is used.

robbert-v2-dutch-base	
Hyperparameter	**Options**
Model type	**RoBERTa**
# of parameters	**125M**
Max seq. length	**64**, 128
Epochs	3, **4**
Batch size	**8**, 16, 32
Dropout	0.05, **0.1**, 0.2
F_1**-score**	**Best Result**
micro F_1-score	0.64
macro F_1-score	0.63

(a) Results with the Dutch RoBERTa model.

twitter-roberta-base-sentiment	
Hyperparameter	**Options**
Model type	**RoBERTa**
# of parameters	**125M**
Max seq. length	64, **128**
Epochs	3, **4**
Batch size	**8**, 16, 32
Dropout	0.05, 0.1, **0.2**
F_1**-score**	**Best Result**
micro F_1-score	0.65
macro F_1-score	0.64

(b) Results with the English RoBERTa model.

xlnet-base-cased	
Hyperparameter	**Options**
Model type	**XLNet**
# of parameters	**110M**
Max seq. length	**64**, 128
Epochs	3, **4**
Batch size	8, **16**, 32
Dropout	0.05, **0.1**, 0.2
F_1**-score**	**Best Result**
micro F_1-score	0.65
macro F_1-score	0.64

(c) Results with the English XLNet model.

Table A2: Hyperparameters tested and selected (in bold) and the F_1-scores resulting with the selected hyperparameters.

1. `https://huggingface.co/pdelobelle/robbert-v2-dutch-base`
2. `https://azure.microsoft.com/en-us/services/cognitive-services/translator/`
3. `https://huggingface.co/cardiffnlp/twitter-roberta-base-sentiment`
4. `https://huggingface.co/xlnet-base-cased`