8. TargetEconN FAIRWAY partner: Berit Hasler (AU, DK)	
Brief description	
The TargetEconN model is an integrated economic and biophysical social planner model which minimizes the costs of meeting a nutrient load reduction target in a specific water body. The model is calibrated for the watershed of the Danish Fjord Limfjorden. It is currently being set up for the whole country of Denmark, and is being used to advise the Ministry of Environment and Food on planning related to the Water Framework Directive.	
Contaminants covered (e.g. nitrate, pesticides etc.)	Nitrogen. The model will be set up for phosphorus when data are available, and a model version is set up to cover effects on pesticide use from the implementation of nitrogen abatement measures.
Intended end users (e.g. farmer, water quality manager, policy maker)	Intended use of results: Policy makers
Level of expertise and/or training required	Experience with linear programming model or the like is beneficial for running the model
Geographical resolution (e.g. field, catchment, national)	The model is set up for one main catchment in Denmark and will be set up for all 23 main catchments. The spatial resolution for the data inputs is field level, and the optimisation takes place at sub-catchment level – e.g. Limfjorden is subdivided into 3 sub-catchments.
Temporal resolution (e.g. daily, annual, long-term).	Annual
Real-time component (e.g. live weather data, soil moisture data feeds etc.)	Soil quality data (clay, sand), retention data, crops at field level, fertiliser application at field level
Number and type of mitigation measures included	24
Platform (e.g. paper-based tool, phone app, bespoke software).	The model is set up in GAMS which is software for optimisation (in English).
Frequency of updates	It is currently updated upon demand from the Ministry, but updates are not done regularly
Cost/availability	Use of the model requires expert consultation
Number of users or number of copies distributed/ downloaded/purchased	The main users are researchers at AU (only 3 users), but the results are used by the Ministry
Links to demo material and other relevant information (e.g. user guides).	http://dnmark.org/wp-content/uploads/2017/03/Fact-sheet-TargetEconN-modelling-framework_Final.pdf
Additional comments	

TargetEconN **FAIRWAY partner: Berit Hasler (AU, DK)**	
Input data required to run the DST	None
Outputs (including links to water quality and economic or financial aspects)	Abatement costs for nutrient reductions in a catchment
Age/provenance of supporting data used to develop the DST	
Country-specific calibration or data requirements (including restrictions on use)	To calibrate the model to other countries detailed catchment data are needed on crops, fertiliser application, and retention in the catchment.
Details of validation and testing	
Date developed/released (or planned release date)	
Author/developer names and affiliations	Berit Hasler, Aarhus University
Member state(s) where developed	Denmark
Member State(s) where currently used	Denmark
Key publication references (including url)	http://dnmark.org/wp-content/uploads/2017/03/Fact-sheet-TargetEconN-modelling-framework_Final.pdf

TargetEconN **FAIRWAY partner: Berit Hasler (AU, DK)**	
Any other useful information (e.g. screenshots of DST input/outputs)	