

urbEN rules of the game

THE ROLES

Roles' objectives, characteristics and strategies are described in the guidelines which are distributed to the teams.

urbEN is a role game comprising seven roles.

THE LOCAL AUTHORITY

LA

The Local Authority is the most demanding role. If possible, this team should be completed so as to staff the following departments with deputy mayors:

- Energy and environment,
- Housing,
- Activities (industry and retail),
- Finance.

THE LOCAL ENERGY OPERATOR

LOC-EN

The Local Energy Operator is a public limited company (governed by private law) but which by status depends on the Local Authority who has set it up as their "strong arm" to implement their energy policy towards autonomy. The Local Authority's chairman is also head of the local operator's executive board.

THE NON GOVERNMENTAL ORGANIZATION

NGO

Possibility for them to delay projects (e.g. if they think the location is not appropriate); Influence on vote (+3 to -3 points). The NGO plays a key role in the game as they are in charge of the energy planning policy qualitative assessment (the quantitative assessment being produced by the software). The team should be staffed with participants wishing to play a more activist role.

THE SPATIAL CONTEXT

The board is a 14x14 chessboard (196 boxes). A small city occupies the centre-left of the board. It includes built-up areas (centre, medium and low density neighbourhoods), urban wastelands, and a social housing estate. Two villages are located at a distance from the core centre and may be extended.

THE ECONOMIC ACTORS

NAT-EN

FARM

PC

DEV

The other actors, the National Energy Operator (NAT-EN), the Farmer (FARM), the Private Company (PC), and the property Developer (DEV) are private companies.

Their purpose is to earn money. Energy saving and renewable energy production are just means to this end. But these players depend also on the Local Authority for prerequisite infrastructure, land availability, authorizations, and also in some cases, as facilitator towards other actors.

Each economic actor has a specific know-how and expertise. We consider that they concentrate on their core business that brings maximum profitability.

Each actor has free access to information concerning other actors but cannot acquire at reasonable cost their specific know-how and expertise.

But actors have limited financial means. They may associate with another actor who has got surplus money or available land but not necessarily the know-how and expertise.

Every project needs an authorization from the Local authority.

Economic players may act on their own but often they depend on other partners to set up actions: prerequisite actions, storage systems, land plots, co-investment.

The remaining space is rural (green). Dark green plots belong to the Farmer. Light green plots belong to other landowners and some of them may be put on auction. Altitude is increasing from East to West, up to the hill crest in column N which allows for projects taking advantage of a steep relief such as wind turbines or pump storage power station.

The energy (heat or electricity) unit used in the game is the MWh. Megawatt-hour (1000 kWh). One TOE (ton of oil equivalent) equals 1,163 MWh.

PLAYING THE GAME

The game is played in several terms of office. Each term of office comprises 4 stages:

- Election of the Local Authority
- Chance cards drawing
- Actions implementation
- End of the term of office

1 ELECTION

Before the beginning of the game teams are formed. Roles may be randomly attributed. However if some players volunteer for NGO they may get this role in priority. As a matter of fact having fully committed activists in this role benefits the game dynamic.

From term 2: the highest bidder in terms of proportion of renewable energy as part of the local energy consumption (in percentage points), job creation, and taxation evolution, is elected as Local Authority for the incoming term.

If in the course of the term of office, the Local Authority has to increase the local tax rates in order to fulfil its commitment, its popularity (support from voters) will be negatively affected: 1 point (e.g. 5% to 6%) tax raise entails 10 lost points in popularity. Correspondingly 1 point tax decrease translates into 5 additional points in popularity

2 CHANCE CARDS DRAWING

Just after the election, 7 Chance Cards are drawn from the pile.

Some Chance Cards allow the Local Authority and other actors to benefit from Government's subsidies for particular purposes (for example, Wind turbines or Housing renovation scheme).

Government grants must be used during the current term of office. Otherwise the Local Authority has to put back the card into the pile at the end of the term.

Other chance cards indicate plots to be put for auction and the starting price. A single plot is bought by only one player (property is not shared).

3 ACTIONS IMPLEMENTATION

A particular action can be implemented only once and by one actor only (the entrepreneur or main investor) who has the specific know-how and expertise.

The entrepreneur (main investor) may get a subsidy from the Local Authority.

They also may get a capital transfer from any other actor with cash available for investment. In this case, the entrepreneur and the co-investor must negotiate the recurring pay-out benefiting the latter for the current and the following terms of office. If the action needs one or several plot(s), it must comply with the action's location constraints. If the entrepreneur doesn't own the required number of plots, they must acquire them or rent them from another player.

An action must always be authorized by the Local Authority.

4 END OF TERM OF OFFICE

At the end of a term of office, the local authority's popularity is assessed as follows:

- The gap (in % of consumption) between the Renewable energy goal and what was achieved is taken into account (automatically by the computer program);
- Tax rises have (automatically) affected public opinion negatively: 1 point tax rise entails 10 lost points in popularity;
- The non-governmental organization opinion (- 3 points to + 3 points) is also taken into account.

At the end of the term of office, if the team playing the Local Authority polls less than 50% it cannot be candidate for re-election.

A team with a negative financial capacity cannot be candidate either.

If not re-elected, the former Local Authority's team replaces the elected team in its previous role.

Are also reviewed:

- Jobs created: conventional, and renewable energy related.
- The economic players' situation: profitability of investments made; financial capacity after previous term's net profits are added to equities.

GAME'S PROGRESSION

STAGE	CONTENT
ELECTION	Election of the Local Authority according to proposed renewable energy goal and tax raise forecast.
CHANCE CARDS DRAWING	7 Chance cards (grants, plots for auction...) drawn from the pile.
ACTIONS IMPLEMENTATION	<ul style="list-style-type: none"> - Only by actor having the ad-hoc know-how and expertise; - Possible subsidy from the Local Authority; - Possible co-investment by another actor; - Possible land purchase or lease from another actor; - Authorization by the Local Authority.
END OF TERM OF OFFICE	Assessment of: <ul style="list-style-type: none"> - Percentage of renewable energy in local consumption; - Players' financial situation; - Public opinion. Local Authority's council's election for the next term of office.