# Scenario

Start: camera on the house

Megan: ‘First things first. A new family has moved into this house. Now, before they can use their TV’s, lights, appliances, they need electricity.

But… Where do they get their energy from and who will be responsible for supplying this energy?’

 Camera turns

Megan: ‘Here we have the supplier. His task is to supply his customers electricity. He achieves this by buying electricity from a producer in order to fulfill the needs of his customers. There are many suppliers in a village and customers can choose which one they prefer. Here is an example list of the most known companies. ( lijstje van: elektrabel…) Now you know who is responsible for giving the customers electricity. But… where does the supplier get its energy from?’

 Camera turns

Megan: ‘The DGO’s main task is to convert energy from the TGO. He switches the high pressure/voltage/… energy to low pressure/voltage/… energy so customers can use this in their houses. The DGO is the one you need to contact as a customer if you need to install a meter into your house.’

But where does this high voltage power come from? And who is responsible for this power?’

 Camera turns

Megan: ‘ The TGO needs to transport the energy, which is made by the producer. For gas for example this happens under high pressure. They are also responsible for getting the energy to the big industry factories like BAYER for example. But now, you guessed it, where does the TGO gets its energy from?’

 Camera turns

Megan: ‘ This facility is responsible for all this energy that we keep on talking about. This can be electricity, gas... In our scenario, we can see a powerplant. However, this is only one of many possibilities. This will be the source of our energy throughout the game.’

 Camera turns back to beginning ( house)

Megan: ‘ Last but not least, do you see that elder man who’s cleaning the rooftop of his house? That, we call a procumer. This is a customer who can produce his own energy due to solar panels.’

Knowing all this, lets get started

## Level 1: customer

Klant is verhuisd en moet nieuwe meter installeren, contacteert dgo voor info. Kan ook zelfvoorzienend worden met bv zonnepanelen.

## level 2: supplier

camera on the supplier’s house

Megan: ‘ Hi, welcome to the second level of ME CITY! In this level you play as a supplier. The main goal, just like a real supplier, is for you to gain customers and not go bankrupt. You should strive for a 100% customer base in this town. You can distinguish your customers from non-customers by the colour of the cube above the house. If the cube above a house is blue, this family is already contracted with you. If, on the other hand, this cube would have another colour, then this family is contracted with another company. If you have all families contracted with you, and haven’t gone bankrupt in trying to do so, you complete the level. But, this won’t be as easy as it sounds.

-red arrow on the money button-

Here you can see the amount of money you have. Be careful though, if you go bankrupt you will lose this level. You get money from your customers and from the pop up events.

-red arrow on the energy button-

Here you can see the amount of energy you have. The more customers you have, the faster your energy will decrease. In order to buy more energy, you click this button to go to the market place. Keep in mind though, if you buy too much energy at once, you will have serious bills to pay. If you buy too little energy, you will lose customers due to outages.

Buying energy isn’t cheap, so in order to continuously satisfy the needs of your customers, you need money. You get money from billing your customers and events that happen throughout the game.

As you can see, there is an option to buy green energy. This option will become available once you’ve been playing the level for a while.

-pop up button, red arrow on it-

These pop ups will appear randomly throughout the game. If you answer them correctly, you will gain benefits for your company. These benefits include: customers, increased customer satisfaction, energy, money… If you pick the wrong answer though, you will lose these benefits. So think wisely and consider the consequences of your answers.

-red arrow on a house-

If you click on one of the houses, you can see what family lives there. Every family has its own preferences. They might value green energy higher than regular energy, so in order to contract this family you will have to go to the market place and purchase green energy. You can also see what this family expects to pay for high and low tariff. If you want to gain this family for your company, you can choose to alter your own tariffs. But be carefull! You have to pay your bills at the end of the month!

-red arrow on the smileys-

On the bottom right hand side, you can see your general customer satisfaction. If you click on a house, you can see a happiness bar filled with green and red. This represents the customer satisfaction the family expects you to deliver. If your general customer service exceeds the expectations of the family, chances are they will be interested in signing a contract with you. You can increase or decrease your general customer service by handling events the proper way.

So in short: keep your clients happy and keep the money flowing!

In the beginning of the game, the camera will be pointed to the suppliers’ building. Afterwards, it will zoom out so you have an overview of the whole town. Then, Megan will appear and say: “‘This would be the perfect situation namely a regulated market ( Here, the player will be able to see that the rooftops of all the houses have the same color because they are all customers of our company). But this situation doesn’t exist, for we are in a deregulated market. (The screen changes to a deregulated market, which is the reality, where a few houses are blue).

She will then give more information about the main goal of this level: ‘As you can see the rooftops have different kind of colors. Each color stands for a different supplier company the customer is contracted with. Our houses are represented by blue rooftops. You have to turn as many houses blue as possible by winning customers.’

At the bottom of the screen, you will be able to see how many customers are contracted with you and the amount of energy you have. The amount of energy will decrease gradually for your customers are continuously using energy. You have to take care your energy go below a certain threshold. You will for example start with 4000 “Energy Units”. If you go lower than 3000 units, a few houses will not get enough electricity thus meaning their happiness decreases. If it goes under the 2500, you will lose customers because customer satisfaction is too low. If you reach 1000 or less, the level is finished and you have to play again for you are a bad supplier.

You have to make sure that you don’t buy too much energy. If you have a surplus of energy, you are wasting energy. You have to make sure that you go to the market often, to keep an eye on the market prices and to purchase new energy to be able to supply the demand of your customers. If you bought too much energy, you will pay a fine*.* As the game continues, you will get the possibility to buy green energy as well as regular energy. When this happens, there will be a difference in the screen: from energy amount:XXX-> regular energy amount:XXX/green energy:XXX

- you can click on all the different houses, if you do so, a menu will appear. This menu shows which company the customer is contracted with, his preferences about the services (green energy, excellent/normal/bad customer service…), companies should give. This way you can see what expectations each customer has. This allows you to make changes to your prices/customer service in order to “convince” this customer to switch to your company. If for example many customers have a desire for green energy, you can gain these customers by going to the market and purchasing green energy, to fulfill their needs. As a supplier, you can also adjust your tariffs. This way you can choose which price you ask, and gain or lose customers accordingly.

Every minute, there will be a pop up on the screen with a situation a supplier could be faced with.

**Pop up 1**: Ooh no, a colleague-supplier went bankrupt… You have taken in his customers! Good for you, but… What do you have to do with your energy supply now?( menu to choose from):

1. Go to the energy market and buy new supply

2. This doesn’t change a thing, I just have more customers and more profit.

3. I have more profit now.

-your chosen answers will be stored and at the end of your game you will get the results.-

**Pop up 2**: you will get a phone call from a customer. He tells you the whole street has a power outage. How do you react? Do you ignore the call? Or do you answer it? If you answer it -> menu to choose from:

1. ‘ Hello, We can’t help you right now. We are aware of the situation. You will just have to wait a few hours.’

2. Hello, Thanks for letting us know, we are aware of the problem. We are going to see what we can do. Your issue should be resolved in a couple of hours.

3. Hi, thanks for calling. We will dispatch some technicians to resolve the issue. We will call you back when we have more information. If you have any questions in the meantime, please feel free to contact us.

If you choose the last one, you are obviously a supplier who want the best for his customers. If you choose this option, you will gain customers.

**Pop up 3**: you will get another phone call from your customer. ‘Hello, I got an invoice for my electricity usage but I think there’s been a mistake. I don’t have an MMR meter but a smart meter, so I think the amount of money I have to pay isn’t correct. -> different ways to react as a supplier:

1. Hi, we will check it with the DGO and call you back at a later time. There might have been a mistake during administration. Thanks for calling, we will contact you as soon as possible.

2. Hi Madam, you have to call the DGO himself if you have questions about the meter installation. We can’t fix your problem. Have a nice day!

3. Hi, thanks for letting us know. You were registered to have an MMR meter. If you have a smart meter, we will send a technician over as soon as possible to gather the information on your SMR as well as do a meter reading. Many thanks, have an nice day.

If you choose the first answer, you gain some customers. The other ones are obviously wrong as a supplier is responsible for making the invoices about the meters. A DGO just installs the meters in the house and this can be a mistake made during the administration. The third answer isn’t correct at all. An MMR meter is the one where you need to send someone to read the info. A smart meter sends the info to your office immediately and there is no need for human interaction.

The player should get some basic information about meters. Megan has to tell the players that customers who have for example an MMR meter, can fake their meter reading. In order to prevent this, one of the technicians from the company has to come over to check if the info is correct.

**Pop up 4**: The Belgian Red Devils are playing the world cup in Russia. You have to forecast if they are going to win or lose. If you buy a lot of energy, and Belgium wins, you will have lots of benefits. If they lose, there will be a loss of energy and money. If you play safe and don’t buy too much energy ( you just want to see and wait if the Belgians are going to win), you will pay double of the prices for the energy you will need if they end up winning. It’s up to you! Choices you can make:

1. You play safe and don’t buy too much energy

2. You choose to have lots of energy

-after the choice is made, this appears:

‘ The Belgians have lost, we will conquer the world another time…’

-if you had chosen the first option, you gain customers and get an amount of money as a bonus reward.

-if you had chosen the second option, you lose lots of money and customers, ‘that’s bad, but we can’t forecast everything.’

There should be a pop-up that you need to send out bills and invoices to your customers in order to get payed for your services. If you don’t send out invoices/bills, you will have no money, and you won’t be able to purchase energy. Choices will have to be made: Customer service or do the billing first?

Short and long term market should be implemented too. The player should make sure he has enough energy. This depends on the amount of customers he has.

The player can purchase energy on the long term market, which is a gamble, but it is cheaper, or he can purchase energy on the short term market, which is safer but more expensive. If there is an imbalance (more/less energy used than purchased) The player will be fined by the DGO.

-level ends, the amount of customers and money you had will be registered in a high score at the end of the game so colleagues can see how they performed in the game.

**Pop up 5**: Your biggest customer has an outage for a couple of days and you can’t sell any energy to them at the meantime. You lose money.

**Pop up 6**: a storm has made there is an outage where you can’t help with to fix it. You lose customers.

**Pop up 7**: Hi, I have a vacation house in the woods where my invoices are delivered. I didn’t know this was possible. Of course I want my invoices get send to my official home address. Can you fix that?

1. Hi, yeah, it’s not possible to have 2 adresses the invoices can get send to. I will call you back later, after I have more information. Have a nice day!
2. Hi, that can be true because you can have a delivery address and a billing address at the same time. We will adjust your address to the one you prefer. Thanks for calling, have a nice day!

**Pop up 8:** You are going to invest in a new software program to help your administration:

* 1. UMAX by Itinerys: implementation cost estimated to 200.000€ and their solution has a 60% fit with our requirements
  2. SAP: implementation cost estimated to 400.000€ and their solution has a 80% fit with our requirements
  3. MECOMS by MECOMS a Ferranti company: implementation cost estimated to 200.000€ and their solution has a 80% fit with our requirements

-the last one is obviously the best choice!

**Pop up 9:** You’ve send out a batch of 10.000 periodic invoices, but there was a bug in your software system – what are you going to do:

* 1. Nothing – ride out the storm
  2. Close the company
  3. Upscale the call centre with extra agents, post messages on social media and website and get in touch with the software vendor for a solution

-as a good supplier you always have to find solutions or taking action if you made a mistake.

**Pop up 10**: A customer calls in to tell us he’s moving out his property – what are you going to do

* 1. Nothing
  2. Send him an end note and close the contract
  3. Send him an end note, close the contract, send the information to market parties who need to know

-the last one is right

**Pop up 11:** We received information from the market that an existing customer of ours has switched to another supplier – what are we going to do?

* 1. Call that customer and tell him he shouldn’t do that
  2. Send him an end note, close the contract
  3. Check if it’s a valid switch – if not send a rejection to the market – if yes – send him an end note and close the contract

-the last one is right

**Pop up 12:** We receive measurements for a gas meter – the measurement is expressed in:

* 1. Kwh
  2. M3
  3. Liters

-M3 is the right option

**Pop up 13:** We receive measurements for an electricity meter – the measurement is expressed in:

* 1. Kwh
  2. M3
  3. Liters

-Kwh is the right option

**Pop up 14:** We supply electricity and gas to our customers – when a customer uses both and we are sending invoices:

* 1. We always send separate invoices for gas and electricity (fout)
  2. We always send one invoice combining gas and electricity (deze is min of meer neutral)
  3. When possible we send one invoice combining gas and electricity (deze is correct)

-the first one is totally wrong. The Second one is kind of neutral

**Pop up 15:** In exceptional cases we need to manualy change an invoice – this costs time – what are you going to about it:

* 1. It only happens a 2 times per month and the manual change takes 10 minutes – we keep doing so
  2. We asked our software vendor to automise it – that will cost 50.000€ - we confirmed the change
  3. We call these customers and tell them to look for another supplier

-the first one is right because it demands too much money.

**Pop up 16:** A Customer calls in because he had a Sauna installed a few months ago (which will most probably have a huge impact on his/her electricity consumption). Which kind of invoice could we issue to avoid a very high next periodical invoice?

1. Intermediate Invoice
2. Correction note
3. Incidental note

The first one is correct.

**Pop up 17**: A customer calls in to let the supplier know that he currently cannot pay his bills / invoices, what are your options as supplier?

1. Postpone the due dates of the invoices or put together a payment plan (correct)
2. Write off the customer
3. Immediately stop delivering energy to the customer

**Pop up 18**: A customer calls in to let us know that he went bankrupt, this means we will have to “write off” the invoice, this is a loss we might need to suffer.

1. Postpone the due dates of the invoices or put together a payment plan
2. Write off the customers (correct)
3. Immediately stop delivering energy to the customer

## Level 3: DGO

‘ Hi, welcome to the 3rd level of ME CITY! In this level you will have the role of a distribution grid operator. You are responsible for your town having electricity. During this level you will learn all the basics as a distributor, what his job is and what issues he might run into on a daily basis. Pay attention, as some of these issues might plague ME CITY, and then it’s up to you to fix them.’ (click for following text)

‘Now, let’s start!’ ( click for following text)

The screen begins on the house of the DGO. Megan: ‘You are responsible for this whole town. A DGO is responsible for a region so you can see it as a monopoly in that region (In our case, this region is a town). All houses are your customers now. You can click on the houses and you get info about which meter is installed in that house, how old the meter is… If it’s older than 3 years, you have to let someone come install a new meter.’

The map will differ from the Supplier level. It will be kind of a ghost town where you can see through the houses (everything is somewhat transparent). As a DGO, you are responsible for the cables so it is important you can see which cables are broken. Through the houses you will see the cables. If a cable is defect, the houses around it will have no electricity.

As player, you need to hold on as long as you can. There will be all kinds of defects in the town. You have to fix them as soon as possible, but the defects will come faster and faster. Afterwards you will see a high score based on who “survived” the longest from all the players who have played.

The DGO comes to you with his problem: DISTRIBUTOR: ‘ Ooh no, oooh what a terror! This can’t be happening right now…’ ( click for following text)

‘ ooh, hey you! You have to help me! You are the new distributor in town right? There has been a power outage for at least 3 hours. It’s fixed right now, but we haven’t found the problem yet, so it can happen again… Please find out what’s wrong with the distribution grid before it is too late! ( click for following text)

‘ ooh my, ooh dear… please don’t let me get fired!’

At the end of the first minute, you will get a pop up: ‘ ooh, there is an electric box broken in town, you have to fix it before there is an outage in the houses around it. – you will see a red dot on the map where the problem is and you have to click on it send over a technician to repair it.

pop up 2: ‘ oh no, the electricity cables are a little bit old, we have to replace them. – you have to click on it to fix it.

Pop up 3: a customer wants to have his old meter replaced.

You will however, only have a certain amount of technicians at your disposal in order to resolve all these issues. Eventually you will have to many issues to fix, and you will end up losing.

You also have to make choices who you are going to help first. You only have a certain amount of technicians at your disposal. If there is a defect in a cable, a whole street can end up without having power. If there is one meter which has to be replaced, you will only lose 1 customer instead of a whole street.

You lose if there is a blackout, if 70% of your customers have no power, etc etc…

## Level 4: TGO

## Level 5: producer

Bedrijven die de energie maken

Zowel producent als importeur zorgen ervoor dat de energie in het netwerk terechtkomt. Er kan op verschillende manieren energie gewonnen worden. Denk maar aan windmolens, hydro-energie, geothermische energie...