What wrong with Eskom and how to fix it - Easy answers to important questions

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**Baseload Power:** The basic, stable supply of electricity needed to meet the country’s minimum demands over a 24-hour period. This is currently overwhelmingly provided by coal and nuclear power.

**Bureaucracy:** Non-elected government administration including officials that oversee policies and procedures.

**Capacity:** The theoretical amount of electricity that a power plant can produce in ideal conditions.

**Supply:** The amount of electricity that is actually produced.

**Demand/Load:** The amount of electricity that is needed by the country at a specific time.

**Distribution:** Taking the electricity from transmission, reducing its voltage and delivering it to the consumers.

**Energy:** Power which comes from using physical or chemical resources. Burning coal delivers energy. So does using wind to turn a turbine.

**Electricity:** A special type of energy which we use to power most things.

**Generation:** The process of turning energy sources like coal, gas, or wind into electricity.

**Grid:** The national network that transmits, electricity by overhead pylons.

**Illicit financial flows:** Money that is illegally transferred from one country to another, usually to either escape taxes and avoid paying workers more in wages.

**Kilowatt-hour (kWh):** Basic unit of electricity equal to one kilowatt of power for one hour.

**Maintenance:** Work that is done to keep something working as it is supposed to.

**REI4P:** The current government’s program for buying renewable electricity from private companies.

**Transmission:** The process of moving very high-powered electricity from where it’s generated to where it will be distributed for use (see the grid).

**Utility:** An organisation that manages the large-scale supply of an essential service or good for the public.
INTRODUCTION

No South African can avoid coming face to face with the crisis at Eskom. Load shedding puts a stop to daily life, closes businesses, and in the end cuts jobs, while the high price of power weighs on every household. Eskom’s debt gives the government another excuse to cut their budgets, resulting in even more unemployment, fewer nurses in clinics, fewer teachers in schools, and fewer roads and houses being built. If you live near a power plant or drought-stricken area, then you have also no doubt seen the results of Eskom’s pollution in the rivers and the air, or in the climate that is changing for the worse every year.

In the past few years, the government has begun pushing forward with what is known as “unbundling”, a foundation for their planned changes to Eskom. You may know that many unions and movements, maybe even your own, are against the government’s plans. They say that the government’s solution will be one that favours businesses over workers, profits over people, and closed board rooms over democratic consultation. However, government and its allies have called these unions and movements reactionary and short-sighted. They say that the choice is between a broken and corrupt Eskom, and a working unbundled Eskom.

If you share the concerns of the unions and movements, if you are on the fence, if you think that there is no alternative, or even if you are just trying to understand what is going on, then this booklet is for you. In the following pages we will answer some of the biggest questions around Eskom’s crisis, unbundling, and the future of the government’s plan for Eskom. These answers will draw from a much bigger research document put together by progressive researchers, activists, and unionists, called Eskom Transformed.

We hope to put to rest the idea that our only choice is between the current broken Eskom and the proposed unbundled Eskom. There is another alternative - a vision of a transformed, worker-led Eskom that puts the needs of communities, workers and the environment above profiteering and investment. The ultimate task of this booklet is to outline this alternative, how it can be achieved, and why we believe that it is worth fighting for.
THE PROBLEMS WITH ESKOM

PRODUCING AND DISTRIBUTING ELECTRICITY

1. How is electricity made?
Almost all electricity is produced by rotating turbines – big propellers. To rotate these turbines, fuels like coal and gas can be burned. They produce heat which creates steam. This steam then rotates the turbines. Wind and water can also be used to rotate the turbine. Finally, sunlight can also be converted into electricity.

2. What is load shedding?
Load shedding is when Eskom takes turns cutting electricity to different parts of the country, sometimes for several hours per day. Let's be clear, these are power cuts! All of us have experienced load shedding and continue to do so.

3. Why is it called load shedding?
In power (electricity) systems, “load” refers to things which use electricity, such as the appliances and lights in our homes. By cutting off access to electricity, Eskom essentially “sheds” (removes) “load” (demand) for
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**6. Why did Eskom not build new power plants?**
Eskom warned about the need for new capacity (from power plants) as far back as 1998. However, the government stopped Eskom from building more capacity because it wanted to get the private sector involved. But the price of electricity was far too low to provide the level of profit to attract the private sector.

When Eskom did start to build new capacity it was far too late, and there have been huge problems with the new capacity that has been built.

**7. Why was maintenance neglected?**
Maintenance costs money. This expenditure and the temporary shut-down of power plants would have negatively affected the financial performance of Eskom. So, because the bonuses of Eskom’s senior managers are based on financial performance, they had an incentive to keep the plants running at all times and neglect maintenance. They profited in the short-term, and Eskom suffered for it. In addition, many of these managers were not properly competent for the posts they occupied.

**8. What is Eskom doing now about this neglect?**
The current Eskom management is doing planned maintenance. This is different from the unplanned repair of simply fixing plants after they break down. This means that Eskom will deliberately, but temporarily, shut off power plants to maintain them.

Eskom claims this maintenance will start delivering benefits from April 2021, with a meaningful reduction in load shedding from September 2021 onwards. This planned maintenance cost around R14 billion in 2019. However, load shedding will not be eliminated entirely and will likely get worse before it gets better. Eskom still expects around 28% of lost capacity — called energy availability (EA) — through breakdowns over the next three years. An EA loss of 20% is considered normal for power stations around the world.

**9. What is the national grid?**
The National Grid is the network that delivers electricity from where it is produced to where it is consumed. It consists of the following components:

- Power plants where the electricity is generated
- Transmission lines for carrying the electricity
- Substations for receiving the electricity from the transmission lines and delivering it to the customers.

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Eskom warned about the need for new capacity from power plants as far back as 1998.
THE COST OF ELECTRICITY

10. Is electricity becoming more expensive?
Yes. Eskom has dramatically increased the price of electricity from around 0.23/kWh in 2007; in April 2021 the price will be R1.34/kWh. If Eskom could have its way, the price would be even higher at R1.50/kWh, but NERSA has prevented this.

11. What is NERSA?
The National Energy Regulator of South Africa (NERSA) regulates the energy industry (electricity, gas and petroleum) in accordance with government laws and policies. NERSA regulates the prices Eskom can charge its customers. It has the power to approve Eskom’s proposed tariffs (price increases) or to lower them. In February this year (2021), NERSA and Eskom agreed to further increase tariffs by 15.63%.

12. What is the link between “full cost recovery” and price increases?
Eskom is a state-owned company (i.e. one that all of us own through the government). Its job is to provide something that is essential. Yet Government policy requires Eskom to act as a normal private company. That means that Eskom has to recover its full costs from us. We are not regarded as citizens with basic rights. We are customers, just like supermarket customers. We can buy as much electricity as we like, provided only that we pay in full for whatever we ‘consume’. See more about this in Question 48.

13. Why is full cost recovery such a problem?
It is not a problem if you’re privileged enough to be rich. But most South Africans are poor, many very poor. We’re notorious, after all, for our world-beating inequality. The poverty of most South Africans makes electricity unaffordable. There is no way Eskom can provide electricity at an affordable price and still recover its costs. Eskom is consequently left as a private company burdened with selling a commodity that is unaffordable to most of its customers. The size of household debt owed to Eskom is a measure of the problem. (See Question 21)

14. Why do poor people have prepaid meters but not the rich?
Prepayment meters enforce the ‘user pays’ principle by taking it to a higher level: there is no credit for poor households. If you are rich, you receive your electricity first and pay for it afterwards. But if you are poor, you have to pay before you can use it. No up-front prepayment means no electricity, regardless of your needs or whatever emergency you might have.
Pre-paid meters are very good at controlling electricity debt. But for users they mean energy poverty.

15. What is energy poverty?
Energy poverty is a lack of sufficient energy to meet basic needs. It is a sign of inequality that there is energy poverty in a rich and industrial country like South Africa in 2021. There are three main causes of energy poverty:

- **You are not connected to the grid**: government policy is to provide electricity to everyone living in South Africa. This means ensuring that every dwelling in South Africa is connected to the Grid. Almost without publicity, Eskom abandoned this development as being unaffordable. That is why large rural areas of the country are not connected. So-called ‘informal settlements’ also remain without a (legal) supply of electricity.

- **You can’t afford to pay for electricity**: there is a large – and ever growing – number of households who are plugged into the national supply but can’t afford to pay for all (or even any) of the electricity they need.

- **You have been disconnected**: these are the households which have been disconnected because of unpaid electricity debt.

Although the exact number is unknown, we know there are millions of people experiencing energy poverty.

16. What about Free Basic Electricity (FBE)?
Government policy is that every household should get 50kWh per month of free electricity. But there are four major problems with this:

1. **You must be a recognised customer of either Eskom or a municipality**: This excludes the households who aren’t on the grid and those who have been disconnected.

2. **Like Free Basic Water, the amount is very far from being sufficient for basic needs**: Like water, it needs to be increased four-fold before it begins to approach a realistic amount.

3. **It is intended only for houses fitted with basic wiring**: That severely limits which appliances can be used at the same time before the current trips.

4. **FBE is now only for the so-called poorest of the poor**: You have to describe yourself as ‘indigent’ (poor). You have to be prepared to bear the stigma of that degrading label and succeed in beating a bureaucracy well known for being difficult.

17. Surely this means we need to rethink the system?
Yes, but that’s not what’s happening. Instead, Eskom is cutting off areas with illegal power connections, and even cutting off entire municipalities which owe it money. As we know, Eskom is also trying to recover its cost by increasing the price of electricity. But this doesn’t even work particularly well, because of course as the price rises, people use less electricity. It’s a vicious circle - the less it sells, the higher the tariff it wants, and the higher the tariff, the less it sells. This is the main driver of what is called the Eskom “Death Spiral”.

**ESKOM’S FINANCES**

18. Is Eskom Bankrupt?
Yes, if government assistance or bailouts are excluded. Eskom spends more money than it earns. This leaves Eskom in debt which it is unable to pay back - making government bailouts essential.

19. Why is debt such a big problem for Eskom?
Eskom currently owes around R480bn in debt. This means Eskom needs to pay back around R31.2bn every year just to cover debt-related costs like interest. That number is about half the City of Johannesburg’s entire budget for 2020! In order to pay back these loans, Eskom now has to borrow even more money. Taking new loans in order to pay old loans is a classic ‘debt trap’ - a cycle that only gets worse each year.

20. Where did this debt come from?
One simple cause of the debt crisis is that Eskom has had to borrow in recent years to pay the rising price of coal to keep the power plants running. However, corruption and mismanagement have also played a huge part. It has long been known that Eskom is a hub of “irregular and wasteful expenditure”, but recently a staggering R178 billion in contracts were found to be dodgy (R178 billion could vaccinate the whole of South Africa 20 times over) This means that Eskom has been paying outrageous prices on tendered contracts or bonuses.

21. Why doesn’t the government deal with the corruption?
The current government is trying to do more about corruption than the previous government led by Jacob Zuma which oversaw most of the looting at Eskom and other state-owned companies. The current Eskom leadership got at least R2.85 billion back from ABB, McKinsey and Deloitte, and are in the process of recovering more than R700m from the Gupta-linked Trillian and from PwC.
also trying to end dodgy contracts with companies like EconOil. However, many of the corrupt people inside and outside Eskom remain politically connected to the ANC and government. Better or more ethical leaders in government will not be enough because the problem is now a systemic one. To solve it there will need to be pressure from outside of government and the ANC.

22. Don’t municipalities also owe Eskom lots of money?
Yes! In 2020, municipalities owed Eskom R46.1bn. There are a few reasons for this. Often, this is due to corruption within those municipalities: we know that many local governments use up their budgets on suspicious contracts or bonuses, leaving nothing for service delivery - never mind paying Eskom back. Another reason for this municipal debt is the fact that a lot of people don't have the money to pay their municipal electricity bills. Finally, sometimes municipalities don't get enough money from the government to fulfill all their tasks, so they use the money from electricity sales on other services.

However, although this is a lot of money, it would be wrong to blame Eskom's problems on municipalities alone. The R46.1bn they owe Eskom is less than 10% of Eskom's total debt owed to others. In reality, there are deeper issues at play.

23. Why doesn't the government deal with the corruption?
The current government is trying to do more about corruption than the previous government led by Jacob Zuma which oversaw most of the looting at Eskom and other state-owned companies. The current Eskom leadership got at least R2.85 billion back from ABB, McKinsey and Deloitte, and are in the process of recovering more than R700m from the Gupta-linked Trillian and from PwC. They are also trying to end dodgy contracts with companies like EconOil. However, many of the corrupt people inside and outside Eskom remain politically connected to the ANC and government. Better or more ethical leaders in government will not be enough because the problem is now a systemic one. To solve it there will need to be pressure from outside of government and the ANC.

24. Is corruption the only source of these problems?
It is easy to look at these problems and think that they would be solved if corruption were to disappear. But this would be a mistake. In a world without corruption, Eskom would still be struggling financially. In other words, even if Eskom only took the cheapest contracts from reliable suppliers, if the excessive bonuses and salaries of those at the top were cut, if municipalities paid their debts, and if reliable and experienced people were put in charge, Eskom would still run into trouble!

Eskom’s crises are driven by the way Eskom is organised and run. We have to look past corruption and understand that Eskom is run as a commercialised public utility.

25. How is Eskom ‘commercialised’?
We often talk about Eskom as if it is a government department or public utility, but in reality Eskom has been ‘corporatised’ since 2002. Corporatisation is the organisation of a publicly-owned entity in the same way as a private company. So Eskom has a CEO and a board of directors, and is expected to make a profit, just like a private company. Its costs need to be paid for by its own income, and it needs to make a profit or borrow money if it wants to expand its operations. The only thing that makes Eskom ‘public’ is that the government is the only “shareholder”.

26. Why has commercialisation ruined Eskom’s finances?
Eskom is treated like a private company but it is expected to work like a public utility, and a public utility is expected to do things a business isn’t. So Eskom has a mandate to provide affordable and reliable electricity for the nation, even when doing so won’t make a profit. At the same time, it is supposed to make up for these costs itself and finance itself through its own profits.

This contradiction, between Eskom-as-business and Eskom-as-public-utility, means that social costs, like extending electricity supply throughout the country, are put on the shoulders of Eskom alone. This cannot be fixed by changing how Eskom works or by changing who runs Eskom. It can only be fixed by changing what Eskom is.

27. Can’t a commercialised Eskom just make more money instead?
There are only two ways for a commercialised, full cost recovery Eskom to get more income: it can sell more electricity, or it can raise the price of the electricity it sells. Most South Africans today are struggling to make ends meet, and so they are trying to use less and less electricity in order to save money. For Eskom, this means that it can’t really sell more electricity because it has no one to sell it to. And load-shedding doesn’t help – every hour of load-shedding means less income for Eskom. And, as we saw earlier, if it raises the price, it reduces the amount used. So in fact there is really no way to get more income.
THE PROBLEMS OF THE ENVIRONMENT

The climate crisis and Eskom’s contribution

27. What is the climate crisis?

You’ve probably heard of climate change, but if not, do have a look at our Climate Change and Climate Jobs question and answer booklet. It can be found at the following link: http://aidc.org.za/download/climate-change/aidc_website.pdf. But don’t worry, we’ll briefly explain the core issues. The first one is global heating.

28. What is global heating?

Global heating, or global warming, is the process of the earth getting hotter. This is an on-going and accelerating process. It is happening because there is too much of certain ‘greenhouse-gases’ in our atmosphere (the atmosphere is the air around the earth that is kept next to the earth by gravity).
29. What are greenhouse gases?

Greenhouse gases occur naturally in our atmosphere. In fact we need them - they keep the earth warm enough to sustain life. However, over time too much has been added to these greenhouse gases by the burning of fossil fuels such as coal, gas and petrol. The most important greenhouse gas is carbon dioxide or CO₂.

30. How do greenhouse gases heat the world?

The sun’s heat is able to pass through the atmosphere, but the greenhouse gases prevent that heat from leaving, which would be the normal cycle. The build-up of greenhouse gases turns the atmosphere into a thick blanket around the earth. This disrupts the normal cycle. It’s like closed car windows on a hot day. The blanket results in global warming.

31. What is the problem with climate change?

As the climate gets hotter, we experience serious crises across the world. These crises get much worse as the earth gets warmer and warmer. A few examples are:

- The melting of sea-ice: this will eventually result in the sea rising to a level which could flood all coastal cities around the world. These include many of the world’s major cities.
- The extinction of many species of animals and plants.
- Heat stress and disease: rising heat affects our bodies directly, as well as spreading diseases such as malaria.

32. Doesn’t Eskom burn coal for its electricity?

Yes. Eskom generates over 91% of its energy from coal. Burning coal produces more greenhouse gases than any other fossil fuel. This is a big part of why South Africa’s economy is one of the most carbon-intensive in the world. Coal produces more carbon than any other fuel for each unit of energy it generates.

33. There are other problems with burning coal, right?

Yes. Coal power plants release a lot of air pollution which affects those living near them. Local communities can suffer from cancer and lung problems. This results in over 2,000 premature deaths per year.
CLIMATE RISKS
1.5°C VS 2°C GLOBAL WARMING

EXTREME WEATHER
100% Increase in flood risk. VS 170% Increase in flood risk.

WATER AVAILABILITY
350 Million Urban residents exposed to severe drought by 2100. VS
410 Million Urban residents exposed to severe drought by 2100.

FOOD
Every half degree warming will consistently lead to lower yields and lower nutritional content especially in tropical regions.

SEA-LEVEL RISE
46 Million people Impacted by sea-level rise of 48cm by 2100. VS 49 Million people Impacted by sea-level rise of 48cm by 2100.

SPECIES
6% of insects, 8% of plants and 4% of vertebrates will be affected. VS
18% of insects, 16% of plants and 8% of vertebrates will be affected.

FORCED MIGRATION
Sub-Saharan Africa, South Asia and Latin America could see more than 140 million people move within their countries’ borders by 2050.
The cost of renewable energy has come down enormously. It is now R0.70/kWh, cheaper than electricity generated by new coal-fired power stations.
There are a lot of jobs in renewable energy, but they mostly come from manufacturing the parts for it. Some estimates find that for every 100 jobs in manufacturing renewable energy components there are 25 jobs in building renewable energy power plants and 7 for operating them.

44. So why don’t we manufacture the components?

Well private companies are only interested in high profitability and that means they want the cheapest inputs possible. Overseas companies make cheaper parts for renewable energy than we do, so that means that local companies, regardless of who owns them, won’t support local manufacturing. All IPPs from the 4th bid window of the REI4P imported their solar panels from China.

45. What are the other problems with the private sector for workers?

To maximise profit, private companies look for cheap inputs and cheap labour costs. There’s often a notion that because something is ‘green’ - i.e. better for the environment - it is necessarily better for people too. But the ‘green economy’ operates under the same principles of profit maximisation as the ‘non-green economy’. IPPs in South Africa have been found to overwhelmingly employ unskilled and temporary workers in the construction phase and have tried to prevent their workers from unionising. They pay workers less and provide less benefits than workers receive in the public sector.

IPP’s pay workers less and provide less benefits than workers receive in the public sector.
THE PROBLEMS WITH GOVERNMENT’S APPROACH

THE GOVERNMENT’S VISION

46. What does the government mean by ‘unbundling’ Eskom?

Today, Eskom does three key jobs:

• **Generates electricity:** Eskom builds and runs power stations like Koeberg and Komati. This is where much of Eskom’s debt is incurred.

• **Transmits the electricity:** using the national grid, Eskom is responsible for getting electricity from the power stations to substations in the cities, towns and villages.

• **Distributes the electricity:** Eskom, together with municipalities, is responsible for...
HOW DOES ESKOM WORK TODAY?

**GENERATION**
Electricity is produced by Eskom's power plants and connected to power lines controlled by..

**TRANSMISSION**
Which sends this electricity across the country to.

**DISTRIBUTION**
which sells it to companies, municipalities, and individuals. The income from this goes to all of Eskom

**INDEPENDENT POWER PRODUCERS**
are for-profit power companies which the government contracts in order to send a certain amount of electricity to the grid. These contracts are the only way in which IPPs can sell their power.

HOW WILL UNBUNDLING CHANGE ESKOM?

**ESKOM GENERATION AND IPPS**
are now given equal access to the grid and put in competition with one another, trying to sell their power to the...

**TRANSMISSION MARKET OPERATOR**
which is now separated from Eskom, and acts as the middle man in the energy market. It buys electricity from whoever is selling it at the lowest price, and sells it on to...

**ESKOM DISTRIBUTION**

**LARGE POWER USERS**
getting the electricity from the substations to the users of the electricity.

Unbundling means separating these three parts into three stand-alone companies. Each company would have its own mandate and directors and be responsible for its own finances. From being one, integrated company, Eskom would be broken up into three new, separate companies.

47. Why do they want to unbundle Eskom?

The government knows that Eskom’s problems will not go away without changing the way Eskom works. Their plan for fixing Eskom’s problems is to completely change the role Eskom plays in how electricity is made, sold, and managed. Unbundling hopes to solve these issues by enabling the competition that is supposed to be found in the free market.

48. What is the government’s vision for Eskom?

In a nutshell, the government thinks that Eskom is a dinosaur. They believe that there is no place for big public utilities in the modern age, that Eskom should let go of its monopoly and allow private for-profit power companies to compete with it. In the end, they want to create a market where electricity is generated for profit maximisation, and where Eskom is just another generator. We explain the consequences of profit maximisation in question 40.

49. What does it mean to create an ‘energy market’?

Think of a different market, let’s say for food. Supermarkets compete with each other in selling food. In an energy market, private companies would compete with each other to sell the electricity they generate.

50. Why does the government want an energy market?

The main argument for an energy market, or markets in general, is that they produce competition and that it is competition which produces low prices. The government says it believes that private power companies will provide the cheapest electricity. In addition, they say that exposing Eskom Generation to competition will somehow make it fix its problems by forcing it to be as efficient as they believe private companies are.

51. Does this mean that the government wants to privatise Eskom?

Almost, but not exactly. Unbundling will not in itself privatise Eskom - the government will still have control over the three ‘unbundled’ parts. Instead, the aim of unbundling is to open the door for privatising the generation of electricity. In this vision, Eskom would maintain the monopoly on transmission and distribution to municipalities. But it would be just another competitor in generation.

52. How does a ‘bundled’ Eskom stand in the way of an energy market?

As it stands now, Eskom controls the entire process of making, moving, and distributing electricity. As long as Eskom remains ‘bundled’, private companies would have to compete with Eskom’s power plants in order to sell electricity to Eskom Transmission. This would give Eskom Generation an ‘unfair’ advantage. As part of the same company, Eskom Transmission could just choose to pay Eskom Generation more for its electricity while ignoring private companies. If the government wants to attract for-profit power producers, then it will have to promise them a fair playing field.

53. How would an unbundled Eskom work?

Electricity can’t just go straight from power plants to the customer end-user – it needs to pass through the power lines and substations controlled by Eskom’s Transmission division first. In an energy market, Eskom’s Transmission would be the natural middleman between power producers and users. It would buy electricity from power producers, and sell it to municipalities, companies or individuals.

The government’s roadmap has a key role in mind for a future unbundled Eskom Transmission. They plan to turn Transmission into what is called an Independent Transmission System and Market Operator (ITSMO). Simply put, its job will be to buy the cheapest electricity from power producers (both Eskom’s own as well as IPPs). Then it would transmit that electricity and sell it to municipalities and individuals.

By being the ‘neutral’ middleman, the ITSMO creates the energy market that the government wants.

54. What is the role of the unbundled Eskom Generation in this energy market?

An unbundled Eskom Generation would compete with all of the private power companies to sell its electricity to the ITSMO (formerly Eskom Transmission). It would not receive any special treatment, and the ITSMO wouldn’t have to buy its electricity if private companies are selling theirs for less.
**WHAT’S WRONG WITH THE GOVERNMENT’S VISION**

55. What would the real cost of renewables be?

When people say that renewables are the cheapest way to make electricity, they are talking only about the costs of construction and maintenance.

The problem is that renewable energy is a bit more unpredictable than coal or nuclear energy. The sun does not always shine on solar panels, and the wind does not always blow on wind turbines.

This is not such a big problem right now, when renewables make up only a small portion of our energy supply. But if the government’s plan goes ahead and private companies start building lots of renewables, then this issue will need to be dealt with:

- Storage systems will need to be designed and built.
- The grid will need to expand to reach the many new distributed solar and wind plants.
- The grid will also need to be adapted to balance the constant variability of renewables.

All of these necessary functions cost money. These costs are called system costs. And they will fall on the shoulders of Eskom Transmission.

56. What do these other costs mean for Eskom Transmission?

Because the government wants to attract investment, they will make sure that Eskom Transmission does not charge private companies for these costs when it buys the electricity. But Eskom Transmission will need to pay for them somehow. And the only way for it to do this is to raise the price of the electricity that it sells.

57. Won’t the result be the same as Eskom’s death spiral?

Exactly. Eskom Transmission will start raising prices to pay for system costs. People will respond by buying less power. Eskom Transmission will have to increase its price more, and so the cycle of tariff increases will continue. This is already happening in some European countries - the price of electricity has gone up as more and more for-profit renewable power comes online.

All of these necessary functions cost money. These costs are called system costs. And they will fall on the shoulders of Eskom Transmission.

As renewable energy was added to Germany’s energy mix, the renewable energy surcharge grew, from less than 1 c/kWh (in euros €) in 2006 to more than 6 c/kWh in 2019. At the same time, the price of electricity rose from 19 c/kWh in 2006 to 30 cents in 2019. The increase in price was a result of the public having to pay for the costs of renewable energy rather than private and fossil fuel companies, or the rich through progressive taxes.
58. We can see the problems for Eskom Transmission. But will unbundling at least fix Eskom Generation?

No. There are two reasons for this. First, most of Eskom’s debt would very likely be allocated to Eskom Generation in the unbundling process, notably the debt racked up through the Medupi and Kusile projects. At the same time, its current power plants are expensive to run and maintain. So it will be in no position to compete with private power companies in an energy market. Its revenue will reduce even further.

Eskom Generation will still be required to back up renewable energy through its coal plants. However, these coal plants will also need to cut down on supply during periods of high supply of renewables (when there is lots of sun and wind) – this is to keep the grid balanced and because the renewable energy will be cheaper. This constant turning power up and down again is very uneconomical and therefore an additional cost for Eskom Generation and another advantage for the IPPs. If Eskom Generation is not financially supported during this process it will collapse.

59. If Eskom Generation can’t stand on its own feet, why shouldn’t we let the IPPs take its place?

The problem is that there is nothing that can take its place at a pace fast enough to generate enough power. It will take a very long time before renewable energy can make enough power to provide for the entire country. So big power plants like Eskom’s will still be needed. No private company will be willing to invest in building these big power plants, because they are incredibly expensive to build and not very profitable to run.

So the government will have to keep bailing out an unbundled Eskom Generation - or else risk the entire power grid.

60. Is unbundling a dead-end?

Clearly the answer is yes! Unbundling will not lead to cheaper electricity in the long run, and it will definitely not fix Eskom’s financial issues either. We will end up with the following picture:

- Eskom Transmission requiring government support because it has to pay for the system costs of renewable energy.
- Eskom Generation requiring government support because it is unable to compete with renewable energy prices.
- Private renewable energy producers making profit on the backs of Eskom Generation and Transmission.

This vision of the government is not in the interests of the masses of South Africans.
61. What does ‘just transition’ mean?

A Just Transition is any transition to a low-carbon economy that secures the future and livelihoods of workers and their communities. This means that new jobs must be created to replace old jobs, with consultation with affected workers and communities. It also means there must be suitable alternate provision if new jobs are not available.

62. What does ‘socially-owned’ energy mean?

Socially-owned means different things to different people. There will need to be more debate to further clarify the idea. NUMSA, for example, in its resolution on socially-owned renewable energy, defines it as: “a sector made up of a mix of energy parastatals [state-owned companies], cooperatives, municipal-owned entities and other forms of community energy enterprises”. Where there is...
consensus is that social ownership is clearly not private ownership for profit.

As far as the State is concerned - whether national, provincial or municipal – it does not have to be either incompetent or corrupt, let alone both. Far from it. While therefore not denying the enormous problems we currently face at all three levels of government, Eskom and municipalities are democratically accountable to us in a way that private companies can never be. We can see how the State of Capture Report by the previous Public Protector and the ongoing Zondo Commission have brought about some transparency and accountability regarding Eskom. Private companies, by law and their own agreements, are accountable only to their shareholders. Eskom is not nearly as accountable or accessible as we want it to be. But it is still obliged to account to our democratically elected Government and Parliament.

Part of what makes a transition ‘just’ is that it offers an opportunity to deliver energy democracy – where all people participate in decisions around energy - through social ownership. But for Eskom to do this it needs to be fundamentally transformed.

63. But what about for-profit community ownership?

We need to be clear about two things: firstly, what we mean by a ‘community’ and secondly what we mean by community ‘ownership’. Community ownership is not automatically a more democratic means of energy ownership. Often the communities people are referring to are led by ‘traditional leaders’. Many of these leaders are completely undemocratic and privatise their community’s resources for themselves. This has resulted in various people taking court cases against their traditional leaders.

But even if a community had democratic systems, should they make a profit selling electricity at the expense of working-class people who don’t own the means of producing energy? Community ownership is progressive if it means the community as a whole participates in energy decisions and benefits from the construction of energy and the affordable access to it.

Investment in renewable energy has flatlined and occasionally decreased in recent years.
64. **Why is a Transformed Eskom best placed to lead our just transition?**

For two crucial reasons that account for both the ‘just’ and the ‘transition’.

- In terms of justice, Eskom is of course best placed to make sure that its workers are either moved to other jobs in Eskom, or that those who are approaching retirement or can’t be moved to new jobs are paid a living wage until they are due to retire.

- On the transition, we know that private sector investment is falling short because renewable energy is becoming less profitable. So public investment, which isn’t driven by the need to maximise profit, must take its place. Eskom is the only existing entity that can receive and deploy such public investment into renewable energy. In addition, it makes sense for Eskom to do this so it can plan the replacement of its aging and dirty coal plants.

These are the necessary components of a just transition. Only Eskom can deliver them.

65. **But how can Eskom overcome the problems with renewable energy’s variability?**

As we explained earlier, the electricity output from most renewable energy is variable. It depends on the sun or the wind which are not constant. This variability needs to be managed. When the output from renewable energy is low, the baseload electricity (generated by non-renewable energy) will need to be increased. Eskom, as a single utility, is best placed to manage this kind of variability. The grid will need to constantly be balanced through powering up and down baseload power plants. Eskom Generation and Transmission, as a single entity rather than being separated, can best coordinate this balancing of the grid.

Eskom can at least do this until 2030. At that stage, either improvements in storage technologies, or developments in other baseload forms of power that are clean, will be ready for mass deployment. Neither storage nor other forms of clean energy will be very profitable. So again Eskom, without the requirement of the profit motive, is best placed to deliver it.

66. **What do we need Eskom to be?**

We need an energy utility that can lead South Africa’s just transition to clean energy, and meet the electricity needs of its people and economy. Only Eskom can do this. But Eskom has to change.

67. **What about the corruption and mismanagement at Eskom?**

This is a huge problem which has to be a priority in transforming Eskom. Eskom has suffered, and continues to suffer, from extensive corruption and mismanagement.

68. **So how do we deal with the corruption and mismanagement?**

By building the power to hold people accountable. The government is divided: either they are involved in and support the corruption, or they do not want to fix it and would prefer to let generation at Eskom die so the private sector can take its place. There are also managers at Eskom who are corrupt and do not deserve, or do, their jobs. Only workers can force the government to change, get rid of corrupt managers, and make sure the right people are employed for the job.

69. **So what would a transformed Eskom look like?**

First, Eskom must be de-corporatised. That means restoring Eskom to its original mandate of supplying the cheapest possible electricity to the economy and all the people, it means removing the ‘user-pays’ and ‘full cost recovery’ principles. Second, workers must have a greater say in how Eskom is run. Worker councils should be set up that have power to affect the workplace and participate in the appointment of senior management.

Thirdly, Eskom must also be responsive to the broader public that includes communities affected by its operations, environmental groups and end-users. This can be done through public assemblies where Eskom and government officials as well as parliamentarians must present themselves. Such transformations would make Eskom truly accountable and transparent to the public it serves. Only this Eskom Transformed can address the climate crisis. Covid-19 should make it clear how serious global disruptions will be if we don’t reduce our emissions.
HOW DO WE FIX ESKOM?
WE NEED TO TRANSFORM ESKOM FROM:

CORPORATION

Commercialised: Aims to be competitive and profitable.

Prioritises and subsidizes big, polluting, energy-intensive industries.

Needs to achieve “full cost recovery”, take on its own debt.

Provides electricity to “customers” who pay the full price of what they use.

TRUE PUBLIC UTILITY

Socialized: Driven by social need, not profit, while also supporting industrial development.

Prioritises and subsidizes poor and rural households and clean and energy efficient industries.

Electricity is funded through large energy users and the treasury, including taxes on the wealthy.

Provides electricity as a basic human need, and at an affordable price to non-polluting industries.
WE NEED TO TRANSFORM ESKOM FROM:

TOP-DOWN CORRUPTION

- Outsources everything along with secretive tenders and corruption.
- Top-down management: narrowly-based board members, and corrupt political appointments.
- Decisions made in secret, public and workers informed after.
- Overpaid, “professional” board members.

BOTTOM-UP ACCOUNTABILITY

- Where in-sourcing is not possible, transparent procurement with worker and public oversight.
- Bottom-up management: Worker representation on board and on appointment panels for senior management.
- Public involved in decision making and consultation, including users’ groups, communities, and unions.
- Other than work-related expenses, no payments or perks for being on the board.
WE NEED TO TRANSFORM ESKOM FROM:

FOR-PROFIT RENEWABLES

- Eskom, with heavy and unavoidable costs, loses out to private renewable and gas IPPs who eventually generate all our electricity.
- Energy transition dependent on insufficient private investment.
- Eskom coal workers retrenched.
- Imported solar panels and wind turbines.

SOCIALLY-OWNED RENEWABLES

- Renewables controlled and managed by a transformed publicly-owned Eskom.
- Energy transition delivered through public investment at the pace and scale demanded by the climate crisis.
- Eskom coal workers retrained to work in building and operating renewables with guaranteed grants where suitable alternate work is not available.
- Locally-made renewables with new manufacturing jobs.
FINANCING A TRANSFORMED ESKOM

69. Won’t transforming Eskom be very expensive?

Yes, there will still be some serious costs involved in transforming Eskom; running a national public utility is expensive. However, this doesn’t mean that we shouldn’t do it. If a Transformed Eskom is the only way to ensure cheap and reliable electricity, achieve a worker-led just transition, and help curb climate change, then these benefits are worth any cost.

In some ways, a transformed Eskom will actually be cheaper to run than the Eskom we have today. We have explained that Eskom is expected to run both as a private business and a public utility. If Eskom is run just as a public utility, then it won’t have to go looking for expensive high-interest debt - instead, it can be funded directly by the government.

71. How can an Eskom Transformed be funded?

Aside from the fact that an Eskom Transformed will be cheaper to run in the end, here are a few funding proposals:

- South Africa is one of the most unequal countries in the world. The top 1% own more than half the wealth, and the bottom 90% own only 14%. A wealth tax on the top 1% could bring in up to R160bn a year. This is a massive sum: Eskom’s entire income for 2020 was R200bn.

- Each year, rich companies dodge their taxes by sending their money to overseas tax havens. The total amount of money lost through these ‘illicit financial flows’ (IFFs) has been estimated at around R200bn every year. If the government were to take serious action in order to curb IFFs, it could collect billions in lost taxes.

- The Public Investment Corporation (PIC), which manages the Government Employee Pension Fund (GEPF), is currently sitting with a massive surplus of relatively rich country; the government is only running out of money because of the limits it has put on itself for fear of scaring off businesses and investors.

70. Is there money to fund this Transformed Eskom?

Yes! Although the government says that it is running out of money, economists and unions have come up with a number of creative and progressive proposals for funding an Eskom Transformed. South Africa is a
funds. Its investments are worth close to R2tn, roughly the same as all of the government’s expenditure in the past year! The PIC/GEPF could safely free up to R800bn to fund the transformation of Eskom.

72. Won’t using the GEPF put workers’ pensions at risk?

No. The GEPF is what is known as a fully-funded pension scheme. This means that the fund must always have enough money in it to pay for the full pensions of every worker who is part of the scheme - from the newest employee to the ones nearing retirement. Unless every single public worker takes their pension at the same time, the vast majority of this money will never be needed.

In reality, the GEPF can be underfunded’ to 52%, and still have more than enough to pay the pensions of employees who are retiring, while keeping a healthy reserve in case of emergencies. In this case, the pensions of retiring workers will be paid through the contributions of new workers, which is how most pension schemes worldwide used to work before the 1980s and 1990s.

73. Can Eskom really be trusted with this money?

We agree that giving money to today’s Eskom would be like pouring it down the drain. But remember, we are not wanting to save today’s Eskom; we want to build a Transformed Eskom! A Transformed Eskom would be transparent, accountable to the public and workers. Its decisions would be made through worker and community participation instead of secretive board meetings and political games in which the needs and aspirations of most South Africans never figure.

74. How would electricity be sold under a transformed Eskom?

Currently, Eskom is expected to produce a profit – they call it a ‘surplus’. A transformed Eskom would produce electricity as an essential public good for people, no matter the cost. We accept what is called the ‘Healthcare Budget’ because we have come to see it as a public good. Let’s therefore be bold with our claim that affordable electricity for everyone is an essential need. This means electricity must be affordable, reliable, and accessible to every South African.

75. What is the difference between a commodity and a public good?

A commodity is simply something that can be bought or sold to make a profit in a capitalist economy. A public good, on the other hand, is something that is made available to all members of the public without being bought or sold for a profit; it is something that everyone has a right to.

For example, bottled water is a commodity because it is packaged and sold in order to make a profit, but tap water is a public good because the government tries to provide it to everyone for as low a cost as possible and doesn’t allow anyone to try and make a profit from it.

76. What are the benefits of making electricity a public good?

Treating electricity as a public good means putting the needs of ordinary people above all else – including shareholders and politicians. It means that Eskom and the government would be required to do what it can to keep tariffs as low as possible, to roll out electricity to remote areas, and to make sure that the supply of electricity is reliable. That would include providing electricity for people who cannot pay for it, instead of cutting them off.

Eskom cannot avoid these responsibilities by claiming to not have the money – if electricity is an essential public good, then they have the responsibility to find the money.

77. Won’t this be more expensive for Eskom?

Yes. Treating electricity as a public good will mean keeping the price as low as possible, and so Eskom will bring in less money. However, the difference is that Eskom will not be forced to bear this burden in the same way it is now – through expensive loans and cost cutting. Instead, treating electricity as a public good means that the government (and all South Africans) accepts the cost of providing electricity to everyone and funds Eskom directly rather than leaving it to fail. See Question 71 for some ways in which this can be funded.

78. Won't municipalities be affected by making electricity a public good?

Yes, enormously! They rely on the sale of electricity (and water) for a large part of their revenue. And, like Eskom, they are expected to somehow keep balancing their books even though increasing numbers of their residents...
ELECTRICITY AS A PUBLIC GOOD

HOW IT COULD WORK

1. To produce electricity as a public good, a publicly-owned Eskom will take the needs of the whole nation into account when it produces and sells electricity to households and businesses.

2. All households get free electricity to cover their basic needs. Additional electricity used is charged and the price rises as more is used.

3. The costs of producing electricity are not borne by the average user or Eskom itself, but by the wealthy in the wider economy.

4. Electricity will also be sold at different prices to different types of businesses based on the ‘polluter pays’ principle.

5. This arrangement will not cover all of Eskom’s costs for producing electricity. But, with electricity as a public good, most of these costs would come from wealthy households and rich businesses – especially dirty ones – that pay more tax. From these and other taxes the government can subsidise Eskom’s costs of producing electricity and fund its expansion.

6. Electrically-powered businesses like green factories will be charged less as they help reduce greenhouse gases.
are in electricity debt. The changes that we say are necessary also require changes to the way the national government calculates the money it transfers to municipalities, so that they are no longer reliant on electricity sales.

79. Alright, we’re convinced, we need to stop climate change and transform Eskom! But where do we begin?

As always, big changes like this require mass mobilisation through sustained organising. Every person who cares about the just transition should get behind Eskom’s transformation, but only workers and their unions can lead this struggle. Workers have to organise themselves and bring in working-class communities. When they do, we think they should prioritise the following:
PRIORITIES FOR SOLVING THE CRISIS!

1. STOP UNBUNDLING AND KEEP ESKOM INTACT!

Unbundling will bring about the privatisation of electricity and accelerate Eskom’s death spiral. This compromises the project to transform Eskom for the people and the potential to rapidly move towards socialised clean energy.

2. FIGHT FOSSIL CAPITAL!

Say no to gas and coal which will seal our fate, delivering climate catastrophe. This requires that we fight fossil fuel capitalists who want to continue exploiting workers, destroying mining-affected communities, and polluting our atmosphere.

3. FIGHT FOR PUBLIC AND WORKER CONTROL OVER OUR ENERGY FUTURE!

Government, capital, and their allies are all Government, capital, and their allies want a privatized energy sector. For an energy sector based on the public good, not profit; the demands for social control over Eskom’s future must be stepped up and our counter-power exercised.

4. BUILD THE INTERNATIONAL CAMPAIGN FOR A PUBLIC-GOODS APPROACH!

No union, utility, or country can tackle the challenges of climate change and the energy transition alone. Solidarity and alliances must be developed with foreign movements, unions, and campaigns. Only a global effort can stop the climate crisis!

5. FORGE AND STRENGTHEN ALLIANCES BETWEEN LABOUR AND COMMUNITIES!

Only social forces led by organised labour in Eskom, mines, manufacturing, and the new renewables sector can resist energy privatisation and transform Eskom.